VOL. XXXVI, NO. 5 MAY, 1918 WHOLE NO. 426

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The Journal of Cutaneous Diseases

Including Syphilis

OFFICIAL ORGAN OF THE
AMERICAN DERMATOLOGICAL ASSOCIATION

$5.00 A YEAR IN ADVANCE

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CHICAGO, ILLINOIS
1918

THE JOURNAL *of* CUTANEOUS DISEASES

INCLUDING SYPHILIS

Entered as second-class matter October 30, 1917, at the postoffice at Chicago, Illinois, under the Act of March 3, 1879.

PUBLISHED MONTHLY

OWNED BY AND PUBLISHED UNDER THE AUSPICES OF THE AMERICAN DERMATOLOGICAL ASSOCIATION

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THE JOURNAL OF CUTANEOUS DISEASES

VOL. XXXVI—No. 5 MAY, 1918 WHOLE No. 426

Original Communications

OSSIFICATION IN A CASE OF SCLERODERMA*

S. POLLITZER, M.D.
NEW YORK

Examples of bone-formation in the skin are extremely rare. In the older literature these cases for the most part deal with calcification and ossification occurring in old tumors—epitheliomas, cysts, etc. In these cases there is probably a necrosis of the tissues as a preliminary to the calcification, a process well known to pathologists and exemplified in the case of calcification of old tuberculous foci in the lungs.

A few cases of true osteoma in the skin in which the bone-formation probably depended on embryonal rests have been described in recent years. In this category we should place Sherwell's case, described by Warren Coleman,[1] in which extensive bone-formation was found on the sole of one foot in a child 3½ years old; Taylor and MacKenna's[2] case in which several scattered plates of bone were demonstrated in the cutis in small regions in an infant; and Heidingsfeld's[3] case in which numerous fine particles of bone were found in a pigmented nevus on the chin of a young man.

On the other hand, instances of true metaplastic formation of bone in the skin have been described, so far as I know, only in cases following traumatic or operative lesions of the skin, the osteosis occurring in the resulting scar tissue.

In the case which forms the basis of this paper the osteosis may be regarded as analogous to the bone-formation in old scar tissue. The connective tissue of an old scleroderma has much in common with old scar issue. In both, it seems noteworthy there is a feeble blood circu-

* Received for publication March 1, 1918.
* Read before the Forty-First Annual Meeting of the American Dermatological Association, Cincinnati, May 24-26, 1917.

1. Coleman, Warren: THE JOURNAL CUTAN. DIS., 1894, 12, p. 185.
2. Taylor and MacKenna: THE JOURNAL CUTAN. DIS., 1908, 16, p. 449.
3. Heidingsfeld: Arch. f. Dermat. u. Syph., 1908, 92, p. 337.

lation. What factors determine the deposition of lime salts in the connective tissue we do not know. The relatively frequent occurrence of these rare dermatoliths in sebaceous-gland tumors and in the subcutaneous fat has lent some color to the theory that the presence of fatty acids plays a rôle in the precipitation of lime salts. In sclero derma occurring in the face, a region particularly well supplied with sebaceous glands, the atrophy of these structures might well serve as the source of an abnormal amount of fatty acids; but certainly the factor of sebaceous glands does not enter into the etiology of calcification in old scar tissue. In these cases, however, the possibility of fatty acids derived from the subcutaneous fat which had been injured by the trauma that produced the scar tissue must be recognized. Scar tissue in the skin, however, is one of the most common of all pathologic conditions, and calcification in scar tissue is extremely rare. Similarly scleroderma is a fairly common disease. More than twenty years ago Lewin and Heller[4] made an analysis of 500 cases of this disease and neither they nor any one since that time has recorded an example of calcification and ossification. There must obviously be some factor of extraordinarily rare occurrence that determines the deposit of lime salts in these relatively frequent conditions.

REPORT OF CASE

History.—Mr. X., aged 47, merchant, married, father of four healthy children, was born in Russia of German parents, educated in Germany where he lived until 21 years old when he emigrated to Colombia, South America, where he has since resided except for brief visits to Europe and the United States. While on a visit to Europe in 1899 he consulted Kaposi in Vienna on account of an affection of the skin of the face, which had appeared the year before, when he was 28 years of age.

Character of Lesions.—This affection appeared as a dense area of ivory-white color on each side of the face and was diagnosed by Kaposi as scleroderma. These areas after several years gradually lost their ivory-white appearance and assumed a nearly normal color. After pressure with the finger the color in the affected area returned promptly, though in the first years of the disease no change in color could be elicited by pressure. The beard hairs, which had entirely disappeared from the affected area again made their appearance though the growth was extremely sparse and feeble. The active process thus seems to have run its course in a few years, and then a kind of spontaneous cure occurred, so that at the present time it is impossible by inspection to determine the exact limits of the original patches, as the skin of the sides of the face presents merely a slightly atrophic appearance, scarcely differing from that of the scalp which has the atrophic aspect of an old seborrheal alopecia.

In the spring of 1915 scattered areas of the skin on both sides of the face and in the regions behind and below both ears appeared unusually dense, "like wood." The patient was in the habit of palpating and squeezing these areas, and in the summer of 1915, while pinching up one of the woody patches he experienced a sharp snap as if something had broken under his fingers. Soon after this a slight elevation appeared at the lower end of the indurated area, and as "the result of

4. Lewin and Heller: Die Sclerodermie, Berlin, 1885, Hirschwald.

an injury in shaving" a round, pinhead-size ulcer developed and remained open or covered with a crust for several months. Then the crust which had gradually attained a diameter of 5 or 6 mm. became loosened at one side and finally came away, the fragment having the consistency and the gross appearance of a piece of bone.

Subsequent History.—The history of the many scattered ulcers on the face and neck which appeared in the course of the next year or two is without special interest, and may be summarized as follows: At a point usually corresponding to the margin of one of the "woody" patches, a small papule appeared, broke down and discharged a little thin secretion; then the resulting ulcer became filled with a mass that resembled a crust but had the consistency of bone; this bony crust in some cases disintegrated in the course of several months,

Fig. 1.—Showing the bony or calcareous extensions in a group of ulcers.

and in some cases projected beyond the level of the skin, sticking out like the end of a sequestrum from its sinus, but unlike a sequestrum, the bony fragment could not be removed by traction. None of the ulcers showed any tendency toward healing.

PRESENT CONDITION

When I saw the patient, in 1917, there were four ulcers on the right side of the face, from the temporal region to the horizontal ramus of the jaw and one below and behind the mastoid; on the left side there were also four ulcers in the corresponding region of the face and one on the neck, below the mastoid. In addition there was an area in the left temporal region 2 by 2½ cm., in which a thin, hard, elastic plate

could be felt under the intact epidermis, like a thin plate of bone or cartilage. Bonelike material formed the floor of some of these ulcers, in some a bonelike fragment filled the ulcer to the level of the skin, and in some there was a projection of bonelike matter above the level, in one case fully half a centimeter in height. Traction on the projecting mass not only failed to loosen it, but showed by the motion of the adjacent skin that it extended for a considerable distance superficially under the epidermis and was part of a bony induration that measured not less than 2½ cm. in length. Palpation in the neighborhood of the ulcers disclosed in every instance a more or less considerable bony hardness under the surface, and the bony mass visible was evidently a part of the bony induration that was palpable under the intact epidermis. The bonelike masses in some of the ulcers was firm and resistant in structure; in some, pressure with a forceps sufficed to crush the mass, as if it had undergone disintegration through weathering. Traction on the bony projections caused no pain. The secretion from the ulcers was insignificant in quantity; their margins were sharp and punched out without any apparent thickening of the edges.

TREATMENT

The patient's general condition was bad. He habitually used alcohol to excess. He was decidedly arteriosclerotic, he had a moderate interstitial nephritis, cirrhosis of the liver, and a glycosuria of from one half to 2 per cent. In addition he had acquired an acute staphylogenic infection on the sole of one foot, which resulted in a suppurative lymphangitis that extended up the leg nearly to the knee and required extensive and free incision with drainage. It may be stated at once that the lymphangitis was cured and that under the care of his physician, Dr. O. M. Schwerdtfeger, who had called me into the case, the patient's stay of two months in the hospital resulted in an astonishing improvement in his general condition.

While the lesions in the face occasioned no pain or inconvenience except in shaving, they constituted so striking a deformity that the patient was anxious to have something done to make his face more presentable. It was obvious, even under superficial examination, that the lesions were produced by the pressure of calcareous or bony masses under the epidermis. To expect an absorption of these masses seemed hopeless; to wait for their slow disintegration and discharge was equally out of the question. The only rational therapy seemed to be the removal in toto of each of the masses by surgical means. This was done in a series of sittings under local anesthesia. To attempt to dissect out the bony masses or plates so as to preserve the overlying epidermis proved impossible, on account of the sclerodermatous atrophic cutis and epidermis and the proximity of the bony plates to the

Fig. 2.—Showing a calcified area sharply demarcated from the normal connective tissue.

latter; the only available measure was to remove the bony plates together with the epidermis over them, en masse, and cover the defects with a skin-graft taken from the patient's thigh. When several ulcers with their bony or calcareous extensions were close together, as on the left cheek, (Fig. 1) the entire area was removed in one piece.* The various grafts "took" in every instance, and the resulting cure was entirely satisfactory from a cosmetic point of view. The large area in the left temporal region, which had not undergone ulceration was left untouched.†

HISTOPATHOLOGY

Abundant material for microscopic study of the lesions was obtained and a number of the specimens were carefully decalcified in nitric acid. I am indebted to Dr. Walter J. Heimann for the sections, and to Dr. George M. MacKee for the photomicrographs which illustrate this article.

The cutis and epidermis presented the classic features of old scleroderma — thin epidermis, condensed connective tissue in which few or only atrophic glands occur—and it does not seem necessary to give a detailed description of these tissues. The whole interest of the case lies in the bony masses which constitute its unique character. Lying in the atrophic cutis there were found extensive masses of altered connective tissue which was in part calcified and in part ossified. Except at the points at which the epidermis was broken down, where there were circumscribed areas of ulceration with the usual picture of leukocytic infiltration adjacent to the bony or calcareous mass that projected into the ulcer, there were no evidences whatever of any reaction on the part of the tissues provoked by the presence of the calcareous and bony masses. At points remote from the ulcers the perfect indifference of the tissue to the presence of these foreign masses was particularly obvious. Figure 2 is made from a section stained with hematoxylin-eosin which serves beautifully to differentiate the normal connective tissue from the tissues which have become calcified, the latter staining blue, the former red. While in some of the sections the calcified mass fills a large part of the field and extends irregularly from the lower margin of the cutis almost to the subpapillary layer, in most cases the calcified areas are arranged regularly in plates or layers that correspond more nearly with the normal anatomic arrangement of the tissues. The picture shows an irregular triangular mass in the lower

* This piece of skin presenting several ulcers with their projecting masses, preserved in Kaiserling, was exhibited at the meeting.

† NOTE.—One year later, March, 1918, this patch seems unchanged; a plate of cartilaginous hardness may be felt directly under the epidermis. This plate is located in a region in which it is not subject to injury from the natural movements of the skin, or from accidental external trauma.

Fig. 3.—Cross section of a plate of ossified tissue.

portion of the cutis which was part of a large rod of bony consistency that before calcification could be felt like a spicule of bone about an inch long, under the skin. The calcified areas appear to be free from any nuclear elements and are composed of condensed, fused, homogeneous fibers of connective tissue. The borders of these masses are sharply marked. But here and there, probably where the calcification

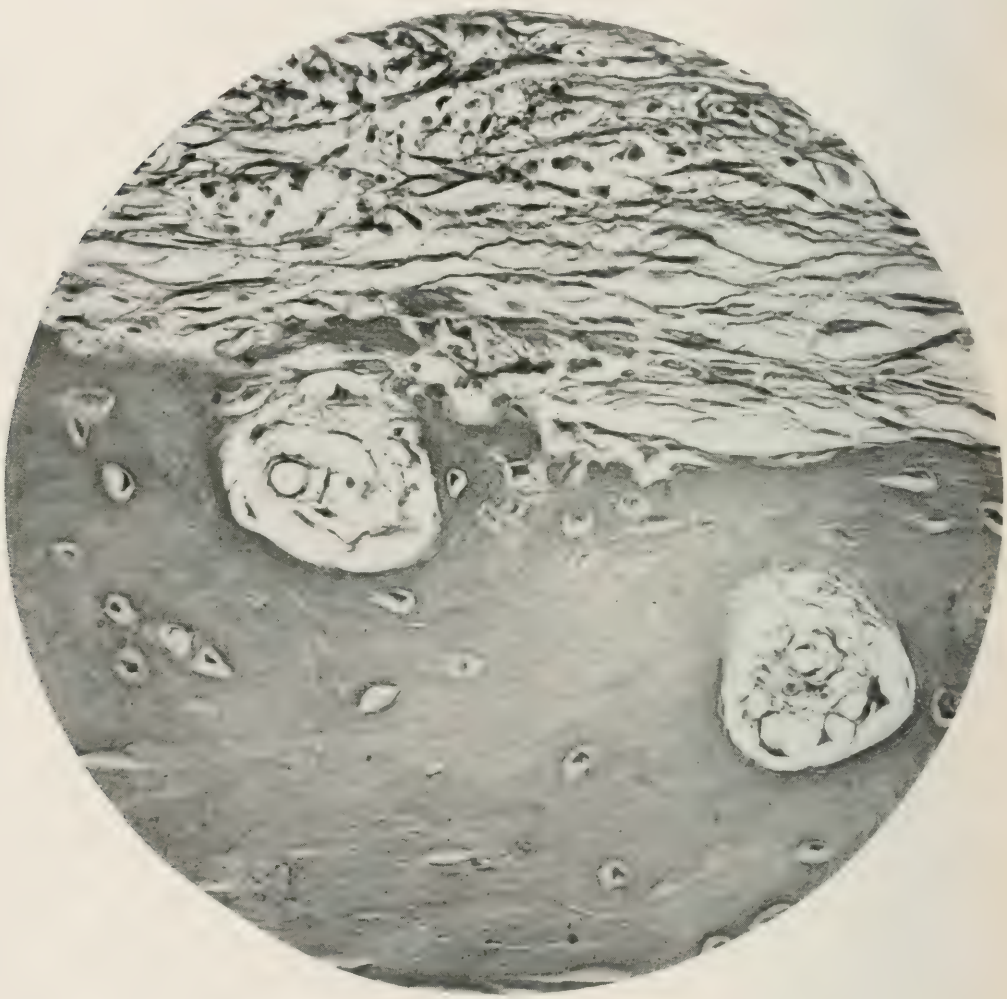

Fig. 4.—Showing the characteristic stellate bone-cells.

is still extending, the line of separation is not sharp and with a higher power of the microscope, minute islands of lime-salt deposits may be seen in the connective tissue fibers. These islands, stained blue in contrast with the red stain of the normal connective tissue fiber, do not appear as deposits on the thickened fibers, but seem to lie within the

fiber itself. The picture suggests an early stage of the calcification of the connective tissue fibers.

In Figure 3 the cross-section of a plate of ossified tissue in the lower middle zone of the corium is seen. A fragment of calcified tissue is seen lying in the defect in the epidermis, the ulcer through which it projected. Figure 4 presents a portion of the same field under higher power, and is intended to demonstrate the characteristic stellate bone-cells. The bone-cells occur mainly in the peripheral portions of the area and are most abundant at one extremity. There is no suggestion of a lamellar structure such as is seen in perfect bone.

SUMMARY

To sum up, the pathologic process begins with a calcification of the altered connective tissue fibers which become condensed and fused. After the deposit of lime-salts many of these areas remain unchanged, provoking no reaction in the cutis; or as a result of injury to the epidermis reach the surface. Some of these calcified areas undergo ossification.

1 West Seventieth Street.

ON A NEW FORM OF PUNCTIFORM KERATODERMIA*

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A punctiform hyperkeratotic eruption occurring on the hands and feet, particularly on the palms and soles, is a rare condition. Herewith, the writer submits the report of a peculiar type of punctiform keratodermia existing on the palms which is exceedingly interesting in its clinical as well as histologic features.

CLINICAL AND HISTOLOGIC FINDINGS

A girl, aged 19, showed the peculiar changes on her hands. On the palmar surface of the hands and fingers, strictly confined to the flexures of the joints, there were numerous miliary, horny, punctiform efflorescences, yellowish or light brownish in hue, from pinpoint to poppy-seed in size. The primary lesions were minute, slightly elevated, at times scarcely visible papules, oval or roundish in shape, showing a slight degree of hyperkeratosis. They usually appeared isolated, but some coalesced to form irregularly shaped eruptions and often showed slight desquamation in the center, so that some were slightly cupped at the summit. But a comedolike horny plug or central conical plug was never seen. The palms showed no hyperidrosis. Diffuse keratosis was not present. There were no dilated sweat-orifices to be noticed; neither was an excentric growth of the lesion demonstrable.

On the backs of the first and third interdigital spaces of both hands, and the fourth space of the right hand, corresponding to the folds, several lesions, singly or in groups, were to be seen.

The distribution and arrangement of the lesions was quite peculiar and exhibited on both hands a well marked symmetry. The soles were intact.

The eruption appeared early in her childhood (before she was 5 years of age), but the patient was unable to give the exact date of its outbreak and course, as there was no subjective symptom. At any rate, that it ran an extremely slow course, was beyond doubt. No hereditary taint was ascertainable.

The patient was afflicted, furthermore, with so-called tuberculids on the ears, and the extensor surfaces of the elbows and knees.

HISTOLOGY: Four pieces of skin (Nos. 1 to 4) which exhibited the horny lesions (in toto six), were removed and examined in serial sections. They all showed practically the same features.

* Received for publication, Feb. 12, 1918.
* From the clinic of Dr. Matsuura.

The horny papule is produced by a circumscribed hypertrophy of the horny layers, exhibiting in places, parakeratosis to a slight degree. The horny layer tends to overgrow toward the outside as well as inside, so that there appear the characteristic microscopic features as shown in Figs. 3 and 4. The malpighian layer, on the other hand, appears to be very little altered. Acanthosis is not associated.

Through the full development of the horny formation, the papillary structure of the corium has quite disappeared under the greater part of the efflorescence (Fig. 3). There is no marked change in the

Fig. 1.—Showing the palms of the patient. Striking symmetry of the localization and distribution of efflorescences will be noted.

underlying corium but there is slight infiltration chiefly of mononuclear round cells, associated with dilatation of vessels in a slight degree.

The lesion showed no specific relation to the orifices of the glands of the skin.

DIAGNOSIS

Few cases of punctiform keratosis on the palms or soles, bearing more or less resemblance to the present one, are found in the literature. Below, they will be cited and differentiated:

(a) Helodermia Simplex et Annularis (Törner)

This shows a horny eruption on the palms and backs of the hands, etc., which appears disseminated. Particularly, in its early stage of

development called "simplex," it resembles to a certain degree the present eruption. But, in Vörner's cases, the growth of the eruption is more rapid, showing an excentric extension. In addition, many other features are quite different.

Fig. 2.—Localization and form of the efflorescences are demonstrated.

(*b*) *Keratodermia Maculosa Disseminata Symmetrica Palmaris et Plantaris* (*Buschke and Fischer*)

This also presents minute punctiform hyperkeratoses and runs a chronic course. There is also a similar histologic finding. The eruption, however, is generally evidently larger than that of the present case, appearing simply in disseminated areas.

(*c*) *Keratoma Dissipatum Hereditarium Palmare et Plantare* (*Brauer*)

The disease is characterized by disseminated horny papules appearing on the palms and soles of the hands and feet. The entire clinical features, however, are quite different. The disease is hereditary.

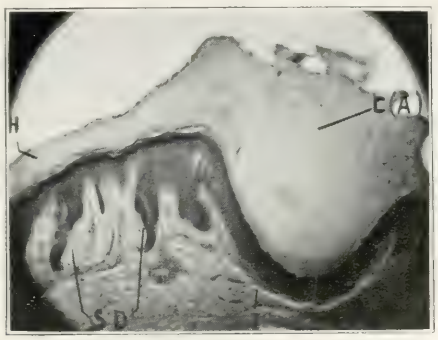

Fig. 3 (Prep. from No. 1).—Vertical section of an efflorescence excised from the fourth interdigital space. c(A), horny plug showing scaliness on the summit (localized hyperkeratosis with a trace of parakeratosis); H, normal horny layer; sd, sweat-duct; i, infiltration in slightest degree. Zeiss, oc. 1; obj.AA.

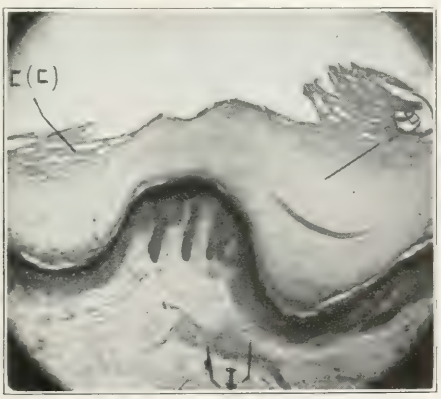

Fig. 4 (Prep. from No. 1).—Showing two keratotic efflorescences c(B) and c(C), occurring closely together. Changes as in No. 1. i, perivascular infiltration.

(*d*) *Disseminated Clavus of the Hands and Feet* (*Davies-Colley*)

The case of disseminated clavus of the hands and feet reported by Davies-Colley shows a resemblance to some extent, regarding the localization of the eruption. It presents also similar histologic features. But the entire clinical features are quite different.

(*e*) *Porokératose Papillomateuse Palmaire et Plantaire* (*Mantoux*)

Histologically, the case seems to be a keratotic angioma (?). The course is acute.

(*f*) *Kératodermie avec Porokératose, etc.* (*Balzer et Germain*)

Its primary lesions seem to bear a certain resemblance. No histologic examination was made. The disease runs rather an acute course.

(*g*) *Porokératose Papillomateuse Palmaire et Plantaire* (*Beurmann et Gougerot*)

This bears a certain resemblance to Mantoux's case, but runs a more chronic course. This is not a pure punctiform hyperkeratosis.

(*h*) *Kératodermie Palmaire avec Porokératose* (*Balzer et Boyé*)

This is not a pure punctiform keratosis, but accompanied by diffuse hyperkeratosis. In addition, vesiculation is to be noticed.

(*i*) Cases such as those of Hallopeau et Claisse, Besnier, Hallopeau, etc., are not similar to ours. Porokeratosis Mibelli, verucca, clavus, arsenic keratosis, Darier's disease, lichen ruber, psoriasis, etc., can be readily differentiated.

Further, compare "A Peculiar Form of Porokeratosis" (Matsumoto), in which the hyperkeratosis occurred exactly at the sites of the orifices of sweat-ducts—porokeratosis in a strict sense of the term.

We are not able to identify the present case with any of the known punctiform hyperkeratoses of the palms and soles, owing to the fact that it differs greatly with regard to its localization and form. Therefore, this may be regarded as a new type of punctiform hyperkeratosis.

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ATROPHIA MACULOSO VARIOLIFORMIS CUTIS*

VARIOLIFORM MACULAR ATROPHY OF THE SKIN—A HITHERTO UNRECOGNIZED AND UNDESCRIBED ATROPHIC AFFECTION OF THE SKIN

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J. L., a man, aged 20, presented himself, Feb. 1, 1918, for examination and treatment for a facial disfigurement which at first glance presented the apparently unmistakable characteristics of the pitmarks of a long elapsed smallpox infection. Both cheeks were profusely studded with round or irregularly round, sharply defined shallow pitmarks, varying in size from a mustard seed to a split pea or somewhat larger in circumference, and were devoid of any evident active or inflammatory change. The writer assumed that the condition was incident to a previous attack of smallpox or chickenpox, and promptly discouraged any efforts for the purpose of remedying or improving the situation.

To the utter discomfiture of the writer, the patient stated that he had never incurred a previous attack of smallpox or chickenpox, and that he had never been troubled with blackheads or pimples. In fact, he had never incurred to his knowledge, any form of dermatologic affection which could predispose the changes for which he sought intelligent interpretation and relief. The pit-marks, first few in number, and very diminutive in size, made their initial appearance about one and one half years ago, without any subjective or objective inflammatory disturbance. They slowly enlarged in circumference, until they attained a fair degree of uniform development, and have steadily multiplied in number until both cheeks, from ear to nose and eye to the angle of the lower jaw, have been profusely and symmetrically studded with lesions.

The writer's skepticism was not entirely overcome by the patient's evident frankness and sincerity, until both the mother and sister were able to corroborate his statement in detail. The patient's father is a retired baker. The patient is 6 feet tall, weighs 180 pounds, is unusually robust and both physically and mentally well developed, and fills a trusted and responsible position of stockkeeper in a large wholesale drygoods establishment.

* Received for publication Feb. 14, 1918.

The lesions as already intimated, bear the most deceptive resemblance to the pit-marks of an old, healed variola. They are for the most part, round or irregularly round in outline. A few are distinctly kidney shaped. Quite a number are linear, with rectangular rather than tapering extremities, and measuring the fraction of a centimeter in length, and preserving a somewhat parallel arrangement to each other, following in a measure, the general lines of cutaneous development. The atrophy is distinct, but shallow, and best observed by reflected light, and the border is clean-cut and sharply defined. The lesions are entirely devoid of pigmentary change, and save for the atrophic change, conserve for themselves the general character and

Fig. 1.—Atrophia maculosa varioliformis cutis. Both cheeks from ear to nose and eye to the angle of the lower jaw are studied with clean-cut and sharply defined atrophic spots.

appearance of the normal skin. On very close inspection a few of the lesions here and there show a very faint, almost microscopic central furfuraceous desquamation. A few faint rose red, pinhead sized points are also observable on close inspection, which the patient states are incipient lesions. The redness is quickly lost when the lesion attains mustard seed size, and is substituted by atrophy and occasionally with very faint furfuraceous desquamation.

The writer was unable to discover any local or general predisposing cause for the atrophic change. The skin of the patient's face, scalp and body was unusually clear, and entirely free from any change that could predispose subsequent atrophy. There were no comedones or papules on any part of the body. The scalp was perfectly normal.

There was no trace anywhere of an acne varioliformis, lichen planus or hypertrophicus, no syphilis, scleroderma, morphea, or any other form of dermatosis that could predispose atrophic changes.

The writer has never encountered any case of similar character in his personal experience, and is unable to find its analogue in the dermatologic literature. It must be naturally classed with cutaneous atrophies, and in the absence of any well defined causative factor, with the cutaneous atrophies of obscure or indeterminate cause, in the so-termed spontaneous or idiopathic atrophies of the skin. It must naturally fall close to the morphea group, of the general class of sclerodermas. It can be easily differentiated from the circumscribed sclero-

Fig. 2.—Showing the pitmarks distributed over the left cheek.

dermas, or so-called morphea, by the entire absence of early infiltration and boardlike hardness, by the multiple character, diminutive size of the lesions, their sharply defined roundish character, clean-cut outlines, and the absence of discoloration and pigmentary change. Its symmetrical distribution and localization to the cheeks, are further differential characteristics. Further, the affection should not be classed or comprised with the additional group of circumscribed sclerodermas, namely, the so-called "white spot disease." It is easily differentiated by the entire absence of scaly, silvery white lesions, and their irregular and less sharply defined outline; the white spot lesions are uniformly larger, more widely distributed, and rarely, if ever, involve the face.

There is probably some additional evidence in this instance for placing varioliform macular atrophy of the skin in the scleroderma group.

The thyroid gland in this particular case was not palpable on careful examination. The patient, who was otherwise normal, manifested a distinct tremor, and complained of palpitation and shortness of breath on unusual exertion. The hair, nails and skin, however, were otherwise normal. The diminutive character of the lesions merits for the affection the name macular, and their deceptive resemblance to the healed cicatrices of variola, the further qualifying term of varioliformis.

TITRATION OF COMPLEMENT FOR ITS POWER TO COMBINE IN THE SYPHILITIC SYSTEM*

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It has long been recognized that the serum test for syphilis is a quantitative reaction, in which the correct measurement of the various elements is of the greatest importance. An increase in the amount of human serum over 0.2 c.c.,† the use of too strong antigen or too small an amount of complement may result in false positive reactions with nonsyphilitic serum, or the too generous use of complement may give a weak reaction in which all weakly positive syphilitic serums will show as negative. It is the constant effort of serologists to hold their tests at the point of highest efficiency, where all truly positive serums will so react, while no nonsyphilitic serum will give a positive result. The difficulty of estimating the amount of complement necessary to hold the tests at the correct strength has been one of the greatest problems of serology, and various attempts have been made to solve it. The original method of Wassermann, fixing 0.1 c.c. of mixed guinea-pig serum as the correct amount for every test, was soon discarded as allowing too great variation in the strength of the tests. Boas,[1] in a series of titrations of the strength of fresh complement, found that it varied from 0.04 to 0.07 c.c. in its titer (the amount necessary to hemolyze completely 1 c.c. of 5 per cent. sheep corpuscle suspension with 2½ titers of ambocepter). A series of ten titrations of fresh guinea-pig serum, care being taken to centrifuge the same quantity of sheep corpuscles at the same speed for the same length of time for each titration, has given me titers from 0.015 to 0.025 c.c. These values were obtained with a 4 per cent. blood suspension, sensitized for at least ten minutes with 2½ units of ambocepter, and the guinea-pig serum was obtained each time by bleeding to death a single animal. They correspond closely to the figures given by Boas. Differences in the strength of corpuscle suspension can easily increase the variations.

The necessity for titration of complement being apparent, it was recognized that allowance must be made, as Wassermann and his

* Received for publication Feb. 15, 1918.

† All quantities refer to the 5 c.c. Wassermann reaction.

1. Boas, H.: Die Wassermannsche Reaktion, Ed. 2, 1914, p. 25.

co-workers had shown, for the anticomplementary action of other constituents of the test, and twice the titer was established as the correct amount of complement for use in the final reaction. This was soon found excessive in many cases, and smaller fractions in excess of the titer were allowed, empirically, without successfully eliminating the variability in the strength of reaction.

In the effort to find a method more exact, Thomsen estimates the amount of complement necessary for this allowance by titrating it in the presence of the full dose of antigen. As an example of the results with this method, Baos[1] gives 0.08 c.c. as the titer obtained in this way with complement that titrates 0.05 c.c. in the hemolytic system. Browning and McKenzie[2] titrate complement for its hemolytic strength. They then titrate it against antigen in one series, against the serum to be tested in a second, and against the combined serum and antigen in a third. At the time of reading, the next morning, if the third series has bound 5 or more hemolytic units of complement beyond the sum of the binding power of antigen and serum alone, the result is read as positive. This extensive system, carried up to 60 units of complement, is made possible by using five titers of amboceptor, thus obtaining a very small complement unit.

Thomas and Ivy[3] use 0.1 c.c. of pooled negative serums plus the full dose of antigen. Complement is titrated against this, incubated, and then amboceptor and blood suspension added. As a sample of their results, they give a titer by this method of 0.05 c.c. of complement that titrates 0.04 in the hemolytic system. The first of these methods estimates the anticomplementary power of antigen only. The third is subject to added unknown factors, for the pooling of several negative serums sometimes results in a strongly anticomplementary mixture. The method of Browning and McKenzie has not become popular, probably because of its cumbersomeness.

NEW METHOD DESCRIBED

In the effort to increase the stability of the Wassermann tests, a standard positive control has been evolved[4] which gives an accurate gauge of strength of reaction. A number of very strong positive serums are preserved by the method of Reudiger[5] by adding an equal

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2. Browning and McKenzie: On the Complement Containing Serum as a Variable Factor in the Wassermann Reaction. Ztschr. f. Immunitätsf., 1909, 2, p. 459.

3. Thomas, B. A., and Ivy, R. H.: Applied Immunology, Philadelphia, J. B. Lippincott Co., 1915, p. 118.

4. Stillians, A. W.: Proposed Standardization of the Wassermann Reaction, Am. Jour. Syph., 1917, 1, p. 767.

5. Reudiger, E. H.: Preservation of Human Serum for Wassermann Reaction, Philippine Jour Sci., 1916, 11, B., p. 87.

amount of glycerin. These are then mixed, and the mixture titrated as the positive control with each set of tests. After the titer (that is, the smallest amount giving complete fixation of complement) of this control has been established with the Wassermann reactions at their highest efficiency, the effort is made to hold them at this point. A method of showing the ability of complement to bind syphilitic serum with antigen seems desirable, as Ottenberg[6] suggests.

In order to accomplish both these ends, four-tenths the titer of the above positive control is combined with the full dose of antigen, and complement titrated against this mixture, allowing a half hour in the water bath for fixation, sensitized corpuscles then being added. The smallest amount of complement giving complete hemolysis after a second incubation for half an hour is used as the unit for the Wassermann reaction proper. The unit so found has varied in 25 of 26 of such titrations from one and one-fourth to twice the hemolytic unit. For instance, if complement titrates 0.04 c.c. in the hemolytic system, the unit for the syphilitic system may be anywhere from 0.05 to 0.08 c.c. As the complement gets old, even before its hemolytic activity grows less and the titer increases, its ability to be fixed by the combination of syphilitic reagin and antigen diminishes, as Margarethe Stern[7] long ago demonstrated.

The other titration of the series just cited (No. 20 in the table) gave a combining unit only 1 1/6 times the hemolytic unit. Such complement is unsafe, even though its hemolytic titer has not diminished in the least. It was nine days old and was, in addition, infected. Fresh complement titrated the same day, gave a good margin between the hemolytic and syphilitic titers. Stern warns against the use of old complement for fear of missing weak positive reactions. Even though the syphilitic titer is known, the use of an amount of complement so near the hemolytic titer adds the risk of obtaining too strong or too weak a reaction from slight inaccuracies in measurement.

The hemolytic unit of complement in this series was always checked, according to the method of Browning and McKenzie,[2] by a second titration in which the diluted complement is exposed to the same shaking and incubation as that titrated with the syphilitic system. The table gives a series of titrations with complement of different ages, showing the difference between the hemolytic and syphilitic titers and the variations in the strength of the Wassermann reaction performed with the syphilitic titer. Complement has been preserved by the addi-

6. Ottenberg, R.: On the Reliability of the Wassermann Reaction, Arch. Int. Med., 1917, 19, p. 456.

7. Stern, M.: Zur Technik der Serodiagnostik der Syphilis, Berl. klin. Wchnschr., 1908, p. 1489.

tion of a small amount of sodium chlorid and refrigeration at from 5 to 10 C.

COMMENT

In eight of the twenty-six tests the control showed a weak reaction, its titer, 0.02 c.c., giving 70 per cent. hemolysis or over. Cases 7 and 11 might be explained as due to old complement, in which the margin between hemolytic and syphilitic titers had become so small that very slight variations in the amount of complement cause disproportionate variations in the strength of reaction. The same explanation would serve for Case 12, giving a 50 per cent. positive reaction with 0.01 c.c.,

SHOWING THE DIFFERENCE BETWEEN HEMOLYTIC AND SYPHILITIC TITERS AND VARIATIONS IN THE STRENGTH OF THE WASSERMANN REACTION

Age of Complement	Hemolytic Titer in C C	Syphilitic Titer in C C	Relation of Latter to Former	Strength of Wassermann Reaction
1.— 8 days	0.015	0.03	Twice	Correct
2.—Fresh	0.02	0.035	1¾ times	Weak
3.— 2 days	0.015	0.025	1⅔ times	Correct
4.— 5 days	0.015	0.025	1⅔ times	Weak
5.— 7 days	0.015	0.025	1⅔ times	Correct
6.— 9 days	0.015	0.03	Twice	Correct
7.—12 days	0.04	0.05	1¼ times	Weak
8.—Fresh	0.05	0.08	1⅗ times	Correct
9.— 2 days	0.015	0.03	Twice	Correct
10.— 7 days	0.02	0.03	1½ times	Correct
11.—10 days	0.02	0.025	1¼ times	Weak
12.—12 days	0.02	0.025	1¼ times	Strong
13.—14 days	0.02	0.025	1¼ times	Correct
14.—Fresh	0.03	0.05	1⅔ times	Correct
15.— 2 days	0.04	0.05	1¼ times	Correct
16.— 4 days	0.04	0.06	1½ times	Correct
17.—Fresh	0.02	0.03	1½ times	Correct
18.— 2 days	0.02	0.04	Twice	Correct
19.— 6 days	0.035	0.07	Twice	Weak
20.— 9 days	0.06	0.07	1⅙ times	Correct
21.—Fresh	0.015	0.025	1⅔ times	Weak
22.— 3 days	0.03	0.04	1⅓ times	Correct
23.— 7 days	0.025	0.04	1⅗ times	Weak
24.—Fresh	0.035	0.07	Twice	Correct
25.— 4 days	0.06	0.08	1⅓ times	Correct
26.— 8 days	0.07	0.1	1⅗ times	Weak

half the titer of the control. No such explanation will serve, however, for Cases 2, 4, 19, 21, and 26, in all of which the complement was comparatively fresh and showed a good margin between the two titers. It is hoped that greater care in titrating will avoid such variations in the future. The apparently irrational variations in the ratio in Case 6, in which it was twice the hemolytic titer and gave a correct Wassermann reaction, while in Case 4 the same complement gave a ratio of one and two-thirds and a weak Wassermann reaction, is still more difficult of explanation. The new method does not by any means eliminate all difficulties, but since it has been used the tests have been held much closer to the point of maximum efficiency than was possible formerly.

Parallel titrations of complement with syphilitic liver antigens and cholesterinized heart antigens have given results corresponding closely

with those obtained with plain guinea-pig heart antigen, which has been used as a routine because of its reliability and cheapness. The titer of the positive control varies somewhat with different antigens, and this must be taken into account when they are used for complement titration. The use of the serum of a single guinea-pig as complement gives some variation in the strength of different antigens, which can be avoided by using mixed serums. The affinity of certain human serums for certain antigens must be met by the use of several antigens with each human serum.

The glycerinized positive control, made up of several strong positive serums to eliminate special affinity for certain antigens, remains constant in strength for months. Before one such control becomes exhausted another can be made up and standardized by a few titrations parallel to the old control. The sensitiveness of the positive control can be varied easily by using larger or finer gradations in titration. The one in present use by me has a titer of 0.02 c.c., and is titrated with 0.05, 0.03, 0.02, 0.015, and 0.01 c.c.

The method must be adjusted by each serologist to his own technic and materials. This is not difficult, and once accomplished, the extra titration need not add greatly to the intricacy of the Wassermann reaction. My tests are allowed a half hour in the water-bath at 37 C. for fixation, then sensitized corpuscles are added and the tests left a half hour in the water-bath. The final reading takes place the next morning, the tests remaining in the refrigerator for about eighteen hours. Four-tenths of the titer of the positive control is the proper amount for the titration of complement for this technic. However, it may not be the correct amount for others.

SUMMARY

1. The use of a mixture of glycerinized strong positive serums, titrated with each set of Wassermann tests as a positive control, gives an accurate idea of the strength of the Wassermann reaction.

2. Titration of complement against the combination of antigen with a fraction of the titer of this positive control gives valuable information as to the combining power of complement in the syphilitic system.

3. By the use of this method of titration, variations in strength of the Wassermann reaction can be minimized.

4. Old complement is apt to lose its power to combine in the syphilitic system before its hemolytic value fails. Such variations are detected and estimated by the new method of titration.

STATISTICAL REPORT OF THE AMERICAN DERMATOLOGICAL ASSOCIATION FOR THE YEAR 1916*

The last statistical report of the members of the Association was made for the year 1911. It was then decided to discontinue the annual reports which had been made without interruption for thirty-four years and hereafter make these reports for every fifth year. The report herewith submitted for the year 1916 is the first of these quinquennial reports.

Your committee offers its congratulations and thanks to the members of the Association for the hearty response made to its request for statistical reports. Thirty-one reports for the year 1916 were received for seventeen cities and yielded a total of 58,387 cases, more than twice the average number of cases reported during the last ten years of our annual reports.

Among the rare skin diseases reported by the members the following may be mentioned: Acanthosis nigricans, 3 cases; acrodermatitis, 3; actinomycosis, 5; blastomycosis, 26; granuloma fungoides, 20; impetigo herpetiformis, 1; Darier's disease, 6; pemphigus vegetans, 6; porokeratosis, 7; sporotrichosis, 6; xeroderma pigmentosum, 24.

The common skin diseases show with few exceptions but little variation from the normal averages. It is interesting to note that the proportion of cases labeled eczema has again fallen, that while forty years ago one-third of all cases seen by our members were called eczema, this year only one-sixth were designated with this term. This sifting process has been continuous throughout the four decades of our annual reports and it seems not unlikely that we shall continue still for some years to remove from the larger group called eczema more and more special forms till that complex fraction of dermatology is reduced to its lowest terms.

One of the diseases formerly included under eczema, the chronic circumscribed eczema of the Vienna school, now known as lichen simplex, is included in our current list for the first time. That the disease is by no means rare is well known to those who are acquainted with it. But it is obvious from the reports that a large number of our members still include the disease under eczema. Thus, while one report shows four cases of lichen simplex per thousand, another five, and another eight per thousand, there are seven reports covering a total of 15,000 cases of all skin diseases which do not report a single case of lichen simplex.

* Received for publication March 5, 1918.

The scabies ratio for the year has again fallen, continuing the declining curve noted in our summary published five years ago. You will recall the fact that the proportion of cases of scabies reported, after reaching 6 per cent. in the late eighties, declined to less than half that figure in 1895 and, after remaining stationary until 1901, suddenly and rapidly rose to nearly 10 per cent. of all cases seen in 1905 and then again dropped to about 5 per cent. in 1911, the last year for which we have a report. For the current report the ratio is only 3.2 per cent. I venture to predict that during the next year or two the assembling of large bodies of recruits in camps and the shifting of large masses of men will result in a great increase in the number of cases of this disease.

The cancerous diseases constitute 2⅓ per cent. of all cases reported, the highest percentage yet attained in our joint records. The cancer curve in our reports has been a steadily ascending line and in this respect our statistics of skin cancer support the generally accepted view that cancer in general is on the increase.

On the other hand, the tuberculous diseases again show a fall below the general average of these diseases even though we have included the tuberculids in this report for the first time. With this addition the proportion of tuberculous diseases exactly equals that shown in our last annual report of five years ago. It is a safe conclusion from our statistics that the tuberculous skin diseases are not on the increase in this country.

Syphilis still holds numerically the second place in our statistics. Over 7,500 cases are reported by our members for the past year, constituting 13 per cent. of all cases seen. The percentage is up to the highest in our records and is nearly 3 per cent. above the general average for this disease. The conclusion that there has been an increase in the number of cases of syphilis, however, is not warranted. The recent awakening of the profession to the importance of treating the asymptomatic cases of the late stage with a view to preventing the grave visceral lesions of this period has brought about a great change in our practice in the treatment of syphilis. The Wassermann-positive syphilitic who happens to be free from obvious lesions is not less the proper object of energetic treatment than is the victim of a facial gumma and it is no doubt the large increase in the number of asymptomatic syphilitics and of those with visceral lesions who until a few years received the current treatment with iodids or mercury by mouth or were not treated at all, that has swelled our syphilis total. It is a good omen for the future that, on the one hand, the patients with early lesions receive energetic treatment controlled by Wassermann tests and, on the other, that the patients are not discharged as soon as obvi-

COMBINED RETURNS OF THE AMERICAN DERMATOLOGICAL ASSOCIATION FOR THE YEAR 1916, FROM JANUARY 1 TO DECEMBER 31, INCLUSIVE

	Ann Arbor	Buffalo	Boston	Chicago	Cincinnati	Detroit	Kansas City	Milwaukee	Newark	New Haven	New York	Omaha	Philadelphia	St. Louis	St. Paul	San Francisco	Washington	Total	Per Cent.
Abscessus	1	1	15	11	16	19	2	3	2	30	125	....	....	1	....	21	17	264	.452
Acanthosis nigricans	....	....	1	....	....	1	....	....	....	....	1	....	....	....	....	....	....	3	.005
Acarodermatitis (grain itch)	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	1	3	.005
Acne varioliformis	....	....	2	4	1	2	3	....	1	5	20	....	2	....	8	3	....	51	.087
Acne vulgaris	86	5	595	371	88	225	27	87	157	147	1,618	24	58	38	38	150	439	4,153	7.112
Actinomycosis	1	....	1	....	....	1	1	....	....	....	1	....	....	....	....	....	....	5	.008
Adenoma sebaceum	....	....	1	6	1	12	2	....	....	2	1	3	....	....	2	....	....	30	.051
Adenoma sudoriparum	....	....	....	....	2	....	1	....	....	....	2	....	....	....	....	....	....	5	.008
Ainhum	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	0	.000
Albinismus (a) generalis	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	1	.001
(b) localis	....	....	....	....	....	....	4	....	....	....	4	2	....	....	....	....	....	10	.017
Alopecia	1	....	293	108	10	56	....	9	....	70	10	5	2	6	20	21	102	713	.142
Alopecia areata	10	2	62	57	8	23	14	9	22	27	176	3	9	3	12	17	46	508	.870
Alopecia furfuracea	....	....	294	106	....	....	15	146	150	37	59	....	....	....	....	2	....	809	1.385
Angio-keratoma	....	....	....	1	....	....	3	....	....	....	....	....	....	....	....	....	....	4	.006
Angioma	2	2	27	22	....	5	....	8	....	1	33	....	1	....	9	1	8	119	.203
Angioma cavernosum	2	1	....	....	....	5	6	2	4	2	3	....	....	....	3	....	1	29	.049
Angioma serpiginosum	....	....	....	....	....	7	5	1	....	....	....	....	....	....	....	....	....	13	.022
Anidrosis	....	2	....	....	....	1	1	....	....	....	....	....	....	....	....	....	....	4	.006
Anthrax	....	....	....	....	....	1	1	....	2	....	1	....	....	....	....	....	....	5	.008
Atrophia maculata et striata	....	....	....	....	....	1	1	....	....	....	....	....	....	....	....	....	2	4	.006
Atrophia senilis	....	....	....	5	1	7	2	....	....	....	3	1	....	....	....	....	1	20	.034
Atrophia unguis	....	....	....	....	....	5	8	....	....	....	....	....	....	1	....	....	2	16	.027
Atrophoderma diffusum (acrodermatitis atroph.)	....	....	....	1	....	3	2	....	1	....	7	....	....	....	....	....	....	14	.023
Blastomycosis	1	.. .	4	9	3	2	1	1	1	....	1	....	....	....	1	....	2	26	.044
Bromidrosis	....	1	4	8	....	8	4	....	3	1	4	....	....	3	1	2	4	43	.073
Callositas	....	....	49	21	....	....	4	2	2	3	23	3	2	....	9	6	12	136	.232
Canities	....	....	10	10	2	2	2	....	....	9	....	....	1	2	....	2	6	46	.078
Carbunculus	1	2	1	20	8	1	8	....	....	5	12	....	1	....	3	2	21	85	.145
Carcinoma lenticulare et tuberosum	....	....	....	54	6	....	....	4	....	6	4	1	....	....	....	1	....	76	.130
Carcinoma "en cuirasse"	....	....	....	3	....	....	3	1	....	....	....	....	....	....	....	....	3	10	.017
Cheilitis exfoliativa	1	.. .	2	8	1	....	4	2	2	2	7	....	....	....	....	6	1	36	.061
Cheilitis glandularis	6	....	2	....	....	....	2	1	1	2	1	....	....	....	....	4	1	20	.034
Chloasma	5	1	25	18	5	15	7	2	4	5	33	1	1	2	....	4	30	158	.270
Cicatrix	....	....	31	18	....	2	2	2	1	....	5	....	....	2	2	6	5	76	.130
Clavus	2	....	19	21	....	14	4	....	2	6	2	2	1	1	4	1	29	108	.184
Comedo	....	....	92	17	2	185	4	7	....	....	32	....	35	....	25	10	88	497	.851
Condyloma acuminatum	5	....	2	27	8	6	9	1	2	3	15	....	1	....	....	....	11	90	.154
Cornu	....	....	3	2	....	1	1	....	....	1	....	....	....	....	1	2	2	13	.022
Dermatitis actinica (sunburn and radiodermat.)	....	....	15	24	2	19	7	2	2	3	19	2	....	....	....	2	10	107	.183
Dermatitis calorica	3	....	15	53	4	4	2	3	...	7	51	3	1	4	....	4	4	158	.270
Dermatitis exfoliativa	2	....	7	3	1	5	3	2	1	3	5	....	....	....	3	2	1	38	.065
Dermatitis factitia	2	....	4	2	....	5	3	1	...	....	12	....	....	....	1	2	3	35	.059

Dermatitis gangraenosa	....	....	....	2	2	1	2	....	....	....	1	....	1	....	....	1	....	10	.017
Dermatitis herpetiformis	4	....	20	17	10	13	6	3	3	1	42	2	1	8	7	2	9	158	.270
Dermatitis medicamentosa	10	1	37	14	2	28	5	4	2	8	61	1	3	11	2	5	23	217	.371
Dermatitis papillaris capillitii	2	....	6	2	2	1	4	....	1	....	15	1	2	....	....	1	9	46	.070
Dermatitis repens	....	....	2	3	....	1	7	....	2	....	6	....	....	....	....	....	1	22	.037
Dermatitis traumatica	2	....	27	20	6	11	2	7	32	2	95	4	18	9	....	6	4	245	.419
Dermatitis venenata	42	5	379	138	35	20	17	51	12	54	413	4	22	42	18	118	65	1,475	2.526
Dermatolysis (cutis elastica)	....	....	1	....	1	....	....	....	....	1	....	....	....	....	....	....	1	4	.006
Dystrophia unguis	....	....	....	1	....	6	1	3	....	....	1	....	1	....	....	....	1	11	.023
Ecthyma	4	....	....	12	2	4	9	2	9	2	19	....	....	2	1	4	14	80	.137
Eczema	82	19	1,318	1,065	138	334	46	110	339	234	1,266	71	168	108	64	249	741	9,352	16.017
Eczema seborrheicum	....	6	222	236	5	66	38	52	103	57	723	22	48	44	19	169	30	1,840	3.151
Elephantiasis	1	....	11	1	2	2	1	....	1	....	4	....	....	....	....	....	1	24	.041
Epidermolysis bullosa	....	....	....	1	2	....	1	....	1	....	....	....	....	....	....	....	....	5	.008
Epithelioma	61	4	185	264	44	96	43	71	63	50	122	16	14	4	60	58	118	1,273	2.180
Epithelioma multiplex benignum	....	....	2	....	....	4	1	3	....	....	4	....	....	....	....	....	....	14	.023
Equinia (glanders)	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	0	.000
Erysipelas	4	3	97	21	71	13	5	4	2	7	40	1	....	....	3	8	15	291	.498
Erysipeloid	....	....	72	9	....	4	....	2	1	1	11	2	....	....	....	....	1	103	.176
Erythema induratum (Bazin)	....	....	8	1	1	2	1	2	1	....	13	1	....	....	....	2	1	33	.056
Erythema multiforme	25	....	32	50	4	23	14	5	15	12	135	6	8	10	9	10	26	394	.674
Erythema nodosum	2	....	35	5	1	7	3	1	1	....	18	....	1	2	8	7	11	102	.174
Erythema scarlatiniforme	....	1	2	5	....	....	....	1	....	1	7	....	1	....	1	1	6	26	.044
Erythema toxicum	....	....	43	53	....	6	3	5	14	....	72	3	1	....	....	3	1	204	.343
Erythrasma	....	....	2	....	4	....	....	4	....	....	9	....	....	....	....	....	....	19	.032
Favus	1	....	24	6	....	9	....	....	4	18	33	....	1	1	....	....	2	97	.166
Fibroma	11	....	18	10	....	2	3	11	....	1	12	1	....	....	....	1	3	73	.125
Folliculitis	16	....	38	28	9	42	2	5	41	11	295	8	36	....	2	23	6	562	.962
Folliculitis decalvans	....	....	5	1	....	1	4	2	3	....	1	....	....	....	....	....	....	17	.029
Framboesia (yaws)	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	0	.000
Furunculus	25	2	77	264	9	28	9	17	29	44	465	4	23	75	8	19	57	1,155	1.978
Granuloma coccidioides	....	....	....	....	....	....	....	....	....	....	....	....	....	....	2	....	....	2	.003
Granuloma fungoides	1	....	4	3	1	1	....	....	....	....	6	....	....	....	3	1	....	20	.034
Herpes simplex	42	2	64	56	8	37	7	9	9	13	126	4	6	9	4	61	24	481	.823
Herpes zoster	9	3	14	39	11	23	12	7	9	11	141	2	7	5	8	31	48	383	.656
Hidroa vacciniforme	....	....	....	1	....	....	2	1	4	....	....	....	....	....	....	....	....	8	.013
Hidrocystoma	....	....	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	2	.003
Hyperidrosis	1	1	38	21	3	13	11	5	7	2	85	2	1	1	3	7	24	225	.385
Hypertrichosis	....	4	177	73	3	35	31	14	....	24	50	5	....	4	....	1	101	531	.909
Ichthyosis	13	....	18	10	6	18	3	7	6	4	27	4	3	1	....	6	14	140	.239
Icterus	....	....	....	....	....	....	....	....	....	....	11	1	....	....	....	1	....	13	.022
Impetigo	24	3	125	234	29	183	17	15	37	244	838	11	66	96	15	100	138	2,544	4.357
Impetigo herpetiformis	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	1	.001
Intertrigo	2	1	21	31	2	2	5	2	1	18	59	....	9	....	4	16	4	167	.284
Keloid	2	1	17	19	1	7	11	4	13	2	45	1	1	2	2	....	25	153	.262
Keratoderma	....	....	8	19	8	....	....	....	....	2	6	....	....	....	....	6	....	49	.083
Keratoma congenitale ("harlequin foetus")	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	1	.001
Keratosis follicularis (Darier)	....	....	....	....	....	2	1	....	....	....	2	1	....	....	....	....	....	6	.010
Keratosis palmaris et plantaris	....	....	3	7	1	17	5	2	....	1	6	....	....	....	12	1	5	60	.102
Keratosis pilaris	5	....	6	7	4	12	3	4	....	....	14	....	...	....	1	6	5	67	.114
Keratosis senilis	22	2	74	90	....	14	39	12	....	3	16	6	1	2	1	9	42	333	.570
Kraurosis	....	....	....	....	....	....	1	1	1	1	1	....	....	....	....	....	....	5	.008
Leishmaniasis (oriental sore)	....	...	....	....	....	....	....	....	....	....	....	..	....	....	....	....	....	0	.000
Lentigo	....	...	....	4	1	6	2	....	....	1	2	....	....	1	8	1	18	44	.075
Lepothrix	....	....	....	....	....	1	....	....	....	1	....	....	....	....	....	....	....	2	.003
Lepra	....	....	....	3	....	....	1	1	1	1	5	....	....	....	....	1	....	13	.070
Leuconychia	....	....	....	....	....	6	1	....	....	....	1	....	....	....	1	....	1	10	.017
Lichen planus	10	....	54	40	23	37	5	6	25	20	111	9	8	3	8	11	31	404	.691

COMBINED RETURNS OF THE AMERICAN DERMATOLOGICAL ASSOCIATION FOR THE YEAR 1916, FROM JANUARY 1 TO DECEMBER 1, INCLUSIVE—Continued

	Ann Arbor	Buffalo	Boston	Chicago	Cincinnati	Detroit	Kansas City	Milwaukee	Newark	New Haven	New York	Omaha	Philadelphia	St. Louis	St. Paul	San Francisco	Washington	Total	Per Cent.
Lichen ruber (pityriasis rubra pilaris)	.....	....	1	....	....	2	....	1	....	....	10	....	....	....	1	....	3	18	.030
Lichen serofulosorum	.....	....	....	....	....	....	....	1	....	....	1	....	....	....	1	....	....	3	.005
Lichen simplex (Vidal)	14	....	....	17	6	10	7	6	....	1	37	....	....	....	....	2	2	102	.174
Lingua geographica	.....	....	....	1	2	....	3	4	....	....	5	2	1	....	....	2	3	23	.039
Lipoma	3	....	2	28	3	2	3	2	1	1	6	....	....	....	3	....	2	56	.095
Lupus erythematodes	6	....	57	31	12	7	8	6	10	12	72	1	6	....	20	11	16	276	.472
Lupus vulgaris	5	....	40	13	2	10	2	4	4	9	27	....	2	....	18	4	10	150	.256
Lymphangiectasis	.....	....	....	....	....	....	1	....	....	....	....	....	....	....	1	....	....	2	.003
Lymphangioma	.....	....	....	1	....	3	2	....	....	....	1	....	1	....	....	....	....	8	.013
Lymphangioma circumscriptum	3	....	6	....	....	....	1	1	....	....	....	....	....	1	....	....	....	12	.020
Lymphangitis	.....	....	4	10	2	2	....	3	....	1	6	....	....	....	2	....	1	31	.053
Melanoderma	.....	....	1	....	....	....	2	....	....	1	....	....	....	....	....	4	13	21	.035
Miliaria rubra (prickly heat)	9	....	26	15	1	3	1	12	....	19	39	....	10	43	....	7	20	205	.351
Miliaria crystallina (Sudamen)	.....	....	....	1	....	6	....	....	....	1	11	....	....	....	....	2	2	23	.039
Milium	1	....	11	14	1	5	7	8	1	4	21	1	....	2	4	6	17	103	.176
Molluscum	8	....	12	17	1	4	5	7	....	4	23	....	....	2	6	2	4	95	.162
Monilethrix	.....	....	....	3	....	1	....	....	....	1	1	....	....	....	....	....	....	6	.010
Morbus addisonii	.....	....	....	2	....	6	1	1	....	....	3	....	....	....	1	....	1	15	.025
Morbus raynaudii	.....	....	8	3	....	....	3	2	....	....	5	2	....	....	....	....	4	27	.046
Morphea	1	....	2	3	....	2	3	....	1	1	8	....	....	....	2	7	3	33	.056
Mycetoma	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	0	.000
Myoma	.....	....	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	2	.003
Myxoedema	.....	....	....	1	....	1	....	4	....	....	2	....	....	....	....	....	....	8	.013
Naevus fibrosus	1	....	6	35	....	1	....	4	....	5	2	....	....	8	1	....	....	63	.107
Naevus linearis	.....	....	4	1	1	3	3	3	1	2	5	....	....	....	2	....	2	27	.046
Naevus papillaris	1	2	7	1	1	1	1	....	....	3	....	....	....	....	....	....	4	21	.036
Naevus pigmentosus	16	2	38	54	1	9	11	4	8	7	47	4	....	2	8	5	16	232	.397
Naevus pilosus	3	....	16	4	2	1	6	2	....	3	3	....	....	....	1	2	6	49	.084
Naevus vascularis	8	3	39	34	....	8	11	7	39	10	27	4	11	....	9	10	22	242	.414
Neurofibroma (v. Recklinghausen)	.....	....	2	1	1	1	....	....	....	1	....	....	....	....	....	1	1	8	.013
Neuroma	.....	1	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	3	.005
Edema angioneuroticum	1	1	8	2	6	3	2	3	1	....	5	2	....	....	....	4	6	44	.075
Onychauxis	.....	....	4	61	....	....	....	....	....	....	2	....	....	....	....	4	3	74	.126
Onychia	1	....	5	3	1	4	5	....	....	5	39	2	9	....	....	1	8	83	.142
Onycho-mycosis	1	....	1	1	1	....	1	....	....	....	7	....	....	....	1	....	1	14	.023
Parakeratosis (parapsoriasis)	1	....	3	2	2	4	1	2	2	2	7	....	....	....	....	....	2	28	.047
Paronychia	2	....	101	2	....	2	2	....	....	6	60	....	1	4	....	3	9	192	.328
Pediculosis capitis	1	....	....	124	....	19	2	2	7	95	311	....	24	17	13	5	30	650	1.113
Pediculosis corporis	.....	....	246	33	3	5	1	....	1	19	88	....	6	....	2	10	12	426	.729
Pediculosis pubic	.....	....	....	15	6	3	5	3	2	4	24	....	5	....	8	2	14	91	.155
Pellagra	3	....	4	3	....	2	3	....	....	....	....	....	....	....	....	....	9	24	.041
Pemphigus	1	....	6	2	1	2	2	....	1	1	7	....	....	....	2	....	1	26	.044
Pemphigus vegetans	.....	....	....	....	1	2	....	....	....	....	2	....	....	....	1	....	....	6	.010
Pernio	1	1	25	7	2	5	3	5	....	7	59	....	4	....	6	9	10	144	.246
Phlegmona diffusa	.....	....	....	...	....	....	....	....	....	....	22	....	....	....	....	....	....	22	.037

Pityriasis rosea	9	....	103	51	3	14	9	3	10	10	172	1	9	10	2	27	49	482	.825
Pityriasis rubra (Hebra)	.....	.. .	....	....	....	....	....	....	....	....	4	....	....	....	....	....	....	4	.006
Pityriasis rubra pilaris (lichen ruber)	3	....	2	1	1	1	....	....	....	....	7	....	1	....	....	....	1	117	.029
Pityriasis simplex	2	....	....	....	....	3	....	....	....	1	132	....	....	....	....	4	17	59	.101
Pityriasis versicolor	23	2	66	48	4	5	5	8	3	4	110	2	13	4	....	11	19	327	.056
Porokeratosis	.....	....	....	1	....	6	....	....	....	....	....	....	....	....	....	....	....	7	.011
Pompholix (dysidrosis)	7	....	29	13	9	....	14	3	10	4	160	1	6	5	....	9	8	278	.476
Prurigo	.....	....	3	....	1	....	....	....	....	....	27	....	2	....	....	....	3	36	.061
Prurigo nodularis	.....	....	....	1	....	....	....	....	....	....	1	....	1	....	....	2	....	5	.008
Pruritus	20	2	151	138	10	7	11	18	38	12	186	12	10	15	23	42	46	741	1.269
Psoriasis	42	7	278	205	40	37	17	32	30	97	590	16	50	12	30	51	121	2,155	3.670
Purpura	.....	1	20	12	4	6	6	3	3	4	35	....	1	....	2	5	7	109	.186
Rhinoscleroma	.....	....	....	....	....	1	....	....	....	....	2	....	....	....	....	....	....	3	.005
Rosacea	5	3	90	100	22	12	5	27	14	38	167	11	7	7	8	24	38	578	.979
Rubella (German measles)	.....	....	1	....	....	4	....	5	....	....	18	....	....	....	....	....	4	32	.054
Rubeola (measles)	1	....	....	6	....	3	1	8	....	....	14	....	....	....	....	1	7	41	.070
Sarcoid	.....	....	....	....	....	1	....	1	....	....	1	....	1	....	....	....	1	5	.008
Sarcoma	3	....	2	7	....	2	4	5	1	....	7	1	....	1	1	1	15	50	.085
Scabies	33	2	209	104	18	41	4	11	53	88	858	4	33	10	17	169	219	1,873	3.207
Scarlatina	3	....	1	10	....	3	1	12	....	....	3	2	....	....	1	....	1	37	.063
Sclerema neonatorum	.....	....	7	....	....	....	....	....	....	....	1	....	....	....	....	....	....	8	.013
Scleroderma	1	....	10	2	1	7	3	2	....	....	14	....	1	....	2	....	3	46	.078
Scrofuloderma	3	1	....	7	....	1	3	3	....	....	13	....	....	1	3	....	10	45	.077
Seborrhea	125	7	455	101	16	11	11	....	14	13	96	32	11	11	16	138	84	1,141	1.954
Sporotrichosis	.....	....	2	....	2	1	1	....	....	....	....	....	....	....	....	....	....	6	.010
Steatoma (wen)	.....	....	14	62	1	9	5	3	4	5	16	....	4	2	....	9	5	139	.238
Sycosis lupoides	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	0	.000
Sycosis vulgaris	7	2	59	40	6	14	9	3	15	8	85	6	6	1	19	20	22	322	.551
Syphilis I. Primary	130	....	72	123	26	38	23	5	25	12	123	3	4	....	21	103	31	739	1.565
Syphilis II. Early	152	1	549	195	143	110	31	7	87	25	508	7	31	2	18	139	171	2,176	3.600
Syphilis III. Late	437	5	710	857	64	236	27	38	129	108	1,603	54	104	8	9	217	68	4,674	8.005
Syringomyelia	.....	....	2	....	....	1	....	....	....	....	....	....	....	....	....	....	....	3	.005
Telangiectasis	2	....	16	26	1	20	4	....	....	6	2	2	....	....	2	12	10	103	.176
Trichophytosis, barbae	1	....	....	6	4	7	7	1	....	6	33	3	1	....	12	3	10	94	.160
Trichophytosis capitis	.....	3	166	60	11	30	5	6	....	38	474	2	20	13	14	22	68	932	1.596
Trichophytosis corporis	9	....	....	128	48	8	2	34	....	69	298	2	7	18	2	6	28	659	1.128
Trichorrhexis nodosa	.....	....	....	....	1	....	1	....	....	....	1	....	....	....	....	1	....	4	.006
Tuberculide (papulo-necrotic)	8	....	6	6	5	2	2	3	4	....	13	1	2	....	....	4	2	58	.099
Tuberculosis verrucosa	1	....	19	3	....	3	1	2	1	2	6	....	....	....	1	....	2	41	.070
Ulcus	16	5	17	112	42	4	10	5	34	15	162	....	2	2	4	16	15	461	.789
Ulcus molle	64	....	8	123	33	8	2	2	....	5	12	....	....	....	6	5	15	283	.484
Uridrosis	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	0	.000
Urticaria	14	4	269	151	26	25	21	14	30	55	883	4	38	28	13	65	104	1,744	2.986
Urticaria pigmentosa	.....	....	1	1	1	2	....	....	....	....	8	....	....	....	....	....	2	15	.025
Vaccinia	1	....	1	....	2	2	....	....	5	2	1	....	....	....	....	....	....	14	.023
Varicella	3	....	12	22	44	10	1	6	10	13	158	....	5	7	....	10	23	324	.554
Variola	.....	....	....	....	3	7	2	2	1	2	....	2	....	....	1	....	....	20	.034
Verruca	20	....	151	121	11	27	13	28	61	35	323	11	16	18	6	36	62	939	1.608
Verruca seborrheica	1	....	2	6	....	8	39	7	1	11	3	....	....	....	....	27	6	111	.188
Verruga peruviana	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	0	.000
Vitiligo	14	....	19	30	6	4	4	5	4	4	38	1	4	....	....	5	20	158	.270
Xanthelasma (eyelids)	6	....	15	3	2	3	5	11	....	....	15	....	....	....	....	2	9	71	.121
Xanthoma	1	2	....	4	2	5	1	2	1	2	9	1	....	....	1	....	6	37	.063
Xeroderma pigmentosum	.....	....	15	....	....	....	....	....	....	....	6	....	....	....	1	....	2	24	.041
Unclassified	5	....	11	33	13	38	....	23	....	57	281	....	5	43	356	14	26	905	1.550
	1,815	130	9,414	7,365	1,306	2,697	975	1,200	1,818	2,255	19,308	442	1,044	800	1,118	2,584	4,116	58,387	99.883

ous lesions have disappeared. For the first time in our statistics we have endeavored to obtain records of the number of cases of syphilis at the three striking clinical stages. Our combined reports show 739 cases seen during the primary stage (1½ per cent. of all cases), 2,176 seen during the florid period (3½ per cent.), and 4,674 cases (8 per cent.) of the late period. Reduced to simple terms the proportion of patients in the primary, secondary and tertiary stages reported by our members is as one, chancre; three, secondary stage, and six in the late period.

The conclusion that the ten million syphilitics in America may be grouped into stages in accordance with these ratios is manifestly absurd. It is only a small part of the total number of cases without obvious lesions or with visceral lesions that come to be treated in our dermatological clinics and moreover the practice in different clinics varies enormously. I have selected from the reports submitted the syphilis returns from those clinics in which I happen to know a special effort is made to induce the patients to continue treatment until they are pronounced cured and to which also the other departments of the institution refer most of their cases of syphilis for treatment.

The clinic with the best record in regard to treatment of visceral and asymptomatic cases reports the following ratios: Primary, one; secondary, four; late, twenty-five, and the average of the best three records is 1:6:24. Grouping the cases in the primary and secondary stages and comparing them with those in the late stage, we find in the clinic with the highest record fifty cases of late syphilis to ten cases in the earlier periods, while the average of the three clinics considered gives us thirty-four cases of tertiary to ten of primary and secondary. In contrast to these records are the reports from six clinics with the lowest record in regard to tertiary cases. In the leading record of this group, "by merit raised to that bad eminence," we find ten cases in the initial stage to forty-eight with lesions of the secondary period, while only fourteen cases are recorded for the tertiary period. It is manifest that in this clinic practically the only cases of the tertiary period that are treated are those with gummous lesions of the skin, while the enormous and important class of cases temporarily asymptomatic or with only visceral lesions are neglected. The general average of the six clinics here considered shows one case in the tertiary period to two in the earlier stages. You will note the contrast with the other clinics which shows proportionately more than seven and one-half times as many cases in the late period as are shown in the reports of the second group of clinics. It is obvious that the clinics represented in this second group are not doing their duty to their patients nor to the community on which the care of many of the victims of neglected ter-

tiary syphilis will ultimately fall. I am confident that the gentlemen who conduct these clinics are not unmindful of their obligations to their patients and the public, but they have not succeeded in impressing on the authorities in charge of the institution in which they work the importance of systematic treatment of every case of syphilis whatever the nature of the lesion, systematic treatment which can only be carried out in a syphilological clinic. Let us hope that the example of the better conditions prevailing in other clinics may serve to stimulate the authorities of these delinquent institutions to a higher sense of their duty.

S. Pollitzer, M.D., *Chairman.*

Society Transactions

Clinical Sessions of the American Dermatological Association

Forty-First Annual Meeting

City Hospital, Cincinnati, May 24-25, 1917

EPITHELIOMA. Presented by Dr. Ravogli.

The case was that of a woman from Springfield, Ohio, who had had a roentgen-ray burn for nine years. She had a goiter, was treated for it by the roentgen ray, the goiter disappeared, but a radiodermatitis developed. In this area epitheliomatous nodules had appeared, and on presentation the whole skin of the breast was affected by the malignant growth. Raw surfaces were present between the infiltrated skin and the ulcerated epitheliomatous nodules. By covering the surface with a salve of diachylon ointment ℥i and ichthyol ʒi the surface had somewhat improved and the suffering of the patient diminished. The speaker did not believe that a radical surgical operation would be of any use, as the epitheliomatous nodules had extended too much, and it would necessitate great mutilation and would not afford a ray of hope.

DISCUSSION

Dr. Pollitzer stated that this patient was inevitably doomed to have cancer, and sooner or later she would die of cancer unless something was done; therefore, he would advocate radical measures. Some of the lesions seemed to him distinctly epitheliomatous, and he thought the only thing to do in a case of this sort was to employ the most radical measures. He would dissect off the entire cutis and cover it with a skin graft.

NEVUS LINEARIS BILATERALIS. Presented by Dr. Heidingsfeld.

The patient was a woman, aged 28, with a dermatosis covering almost the entire body—feet, lower extremities, trunk, hands and upper extremities, and mildly present over the face. The disease resembled psoriasis and the spine was studded with scaly papules distributed over limited areas in a well defined linear form. The patient was first seen by the speaker April 11, 1911, and during the six years' interval of personal observation, there had been little change in the character of the eruption. Itching and disfigurement had been the chief symptoms. Treatment in every form had been entirely barren of results. The case conformed in many of its aspects to some of the aberrant types of ichthyosis described in the literature, particularly to that of érythrodermie congénitale ichthyosiforme. His diagnosis was nevus linearis bilateralis.

DISCUSSION

Dr. Schamberg stated that the history of this case was atypical; the patient had never had freedom from the eruption nor any spontaneous disappearance of the lesions. Treatment had been likewise ineffective. In spite of the fact that some of the lesions were grouped in a linear manner, he would not disregard the diagnosis of psoriasis. He had had three cases within two years with distinct linear streaks of psoriasis; in one of them the generalized psoriasis had disappeared, leaving a persistent linear patch. In the present patient the palmar surface of the hand was involved with psoriatic lesions and she had lesions on the elbows and scalp suggestive of psoriasis.

Dr. Hartzell could not quite agree with the diagnosis of psoriasis in this case on account of the appearance of the eruption. In certain cases of psoriasis

it was possible to produce by slightly beading the skin the picture described in Ziemssen's Handbook of Diseases of the Skin. There was considerable keratosis, and he was not at all convinced that this was a case of psoriasis on account of involvement of the shoulders, and bilaterally, on the back, there was much less marked infiltration.

DR. WENDE asked whether or not the eruption varied from time to time.

DR. HEIDINGSFELD stated that it remained about the same and was persistent.

DR. POLLITZER asked what parts of the body were mostly involved.

DR. HEIDINGSFELD replied that the lesions were mainly on the forearm.

DR. PUSEY said he knew that psoriasis could begin in early infancy, and that it was a very obstinate affection, but he did not know that psoriasis would persist absolutely unchangeable in its features, and that was one point in this case. Without going into an elaborate reason for his opinion, he believed this was a case of congenital diskeratosis. One might call it nevus or ichthyosis hystrix bilateralis; it did not differ from congenital nevus except in extent.

DR. MACKEE said that both linear psoriasis and linear lichen planus might resemble a linear nevus, and it often required a microscopic study in order to differentiate them. It was difficult to consider this case in any other light than a keratoma, or localized congenital keratoderma, because it began a few days after birth and reached the maximum of development in six weeks, since when there had been no change. The fact that the lesion had not responded to the ordinary remedies given for psoriasis would also speak against such a diagnosis. The speaker said that such a condition could be called hyperkeratotic nevus, ichthyotic nevus, localized ichthyosis, ichthyosis hystrix, or localized congenital keratoderma. The main fact, however, was to recognize that we were dealing with a congenital anomaly of cornification.

DR. HEIDINGSFELD, in closing, stated that when the patient was first seen it was his impression that it was a linear nevus. Pilyriasis rubra pilaris could be definitely ruled out by its congenital origin, its absolute stationary character, entire absence of any associated constitutional disturbances and the characteristic chilly, creepy sensations which accompanied that affection, the absence of defluvium capillorum and scaliness of the eyebrows and scalp, uninvolvement of the nails and follicular keratoses invariably present over the first phalanges and extensor aspects of the body. Furthermore, the biopsy showed changes more in conformity to that of linear nevi, namely, a parakeratosis of the epidermis and structural changes in the elements of the skin, without any associated inflammatory disturbance.

LUPUS ERYTHEMATOSUS FOLLOWING XANTHOMA DIABETICORUM. Presented by DR. RAVITCH.

Mrs. W., aged 48, presented herself at the speaker's office three years ago with a group of papular and nodular elevations of yellowish color, accompanied by slight itching. The lesions were found on the upper part of the body, but more so on the face. The family history was good. The Wassermann reaction was negative. Sugar and a trace of albumin were found in the urine. Under careful dietetic treatment the nodules began to disappear. Some months later typical lesions of lupus erythematosus began to make their appearance. None of the lesions was ever influenced by any remedies except the quartz lamp. The condition suggested itself to him as one of lupus erythematosus following xanthoma diabeticorum.

XANTHOMA TUBEROSUM MULTIPLEX HYPERTROPHICUM. Presented by DR. RAVITCH.

Mrs. D., aged 38, presented herself at the speaker's office the latter part of January, 1917. The family history was good. The trouble began eight years ago on the left index finger, starting with an abscess. A year later the thumb

became involved. Finally, all of the fingers of both hands were affected. Hypertrophy and a cornified condition of the skin became troublesome and painful. The distortion was preceded by pain and sometimes by cyanosis. Ulceration was almost absent. A xanthoma nodule was found on the elbow of the right arm. While symptoms of Raynaud's disease were simulated, the constitutional symptoms and the course of the disease of the latter were totally absent. There was no apparent vasomotor nutritive disturbance. The Wassermann reaction was negative. A microscopic examination of a section showed a mass of calcified lime salts. The diagnosis suggested by Dr. Pollitzer was xanthoma tuberosum multiplex. However, until a thorough pathologic examination of the larger specimen had been finished, the diagnosis must remain in doubt.

DISCUSSION

DR. POLLITZER stated that in xanthoma tuberosum the lesions were not always as yellow as in the typical case. The amount of coloring matter in tumors of the xanthoma type varied. On the elbow of this patient there was a typical tumor of xanthoma tuberosum. There was a great deal of fibromatosis of the older lesions of xanthoma tuberosum, and the masses on the finger tips were subject to the possibility of frequent injury, which, in the condition of diminished resistance due to the pressure of the tumors, might easily result in ulceration. Pressure of the tumors interfered with the circulation and with the innervation of the part and might produce such symptoms as the doctor referred to as suggestive of Raynaud's disease.

DR. PUSEY said he was much obliged to Dr. Pollitzer for the suggestion mentioned, as it had not occurred to him. He asked Dr. Pollitzer if he had seen other cases with lesions in the same location.

DR. POLLITZER replied that he had seen xanthoma tuberosum on the nails.

DR. PUSEY said it was a most extraordinary clinical picture, and one he was glad to have seen. He would venture to discuss the treatment of the case in this connection. It was desirable to reduce there tumors, if possible. For the last few years he had been treating more satisfactorily than ever before xanthoma about the eyelids with the cautery, applying it with minute punctures. The results were prompter and better than he had seen before. The method might be tried in this case.

DR. MCEWEN said that these tumors were infiltrated with calcareous deposits, and one could see where little growths could be dug out.

DR. POLLITZER, in referring to the calcareous masses, asked if microchemical tests had been made. It seemed to him not unlikely that the amorphous or crystalline matter was cholesterol—a substance occasionally found in xanthoma tumors.

LA GRIPPE INFECTION, INVOLVING THE MUCOUS MEMBRANE, RESEMBLING TUBERCULOSIS. Presented by DR. HEIDINGSFELD.

The patient was a young girl, aged 14 years, who incurred an infection of la grippe in 1915. This was complicated with pleurisy, and convalescence was not fully established until the following summer. Chronic rhinitis persisted for a year or more. In the spring of 1916, the patient's gums over the lateral upper incisors became very spongy and bled readily. The inflammation spread rapidly to adjacent mucous membranes, particularly to the mucosa surrounding the upper teeth, both without and within, and to the upper lip. The affected areas presented a raw, ulcerated appearance. The tip of the nose was also mildly inflamed, and the condition conformed in appearance to that of a follicular lupus. The case was presented for diagnosis. The speaker was inclined to the diagnosis of tuberculosis of the mucous membranes. The patient had shown material improvement with systematic injections of an autogenous prepared vaccine.

DISCUSSION

DR. SCHAMBERG said in this case he should suspect a tuberculous gingivitis. The history of a pleurisy following chronic influenza was suggestive. We were told by internists that most cases of pleurisy were tuberculous in character. The patient had an ulcerated lesion on the under surface of the lip, and a similar lesion on the tip of the nose. The fact that tubercle bacilli were not found in the tissue was not conclusive evidence that it was not a tuberculosis.

DR. POLLITZER stated that his first impression of this case was that the lesion was tuberculous, and although he made this diagnosis with caution, he did not know what else it could be. The failure of the tuberculin reaction was of course significant, but by no means conclusive. Far more valuable would be the simple experiment of removing a portion of the tissue and planting it into the belly of a guinea-pig, and he hoped Dr. Heidingsfeld would do this, and make known the result of the experiment.

DR. RAVITCH said that pyorrhea might have a great deal to do with the cutaneous manifestations. It was well known that these patients neglected themselves; they did not use a handkerchief as they should and infected themselves.

DR. MOOK said he had had several cases in which the gums were involved, and had had excellent results from applications of acid nitrate of mercury applied once a week. It produced quite a reaction and most of the patients had gotten well with that treatment.

DR. HEIDINGSFELD, in closing, stated that there was a possible anatomic basis for the lip and mucous membrane infection in this case. The irritating and infectious discharge from the nose might have passed through an anatomic canal which led from the floor of the nose to the upper lip. He was informed by anatomists that such a canal existed in the embryo, and might have remained patulous in this instance at the time the infection took place. Gingivitis could be ruled out in this case from the fact that careful roentgen-ray examination revealed no basis for that condition.*

PELLAGRA. Presented by DR. RAVOGLI.

The patient, a man from North Carolina, had been an alcoholic for a long time. When he was admitted to the City Hospital he was assigned to the speaker's service. He had an erythema on the backs of the hands and lower third of the arms. The erythema was brown red, slightly elevated, with a little desquamation. He was affected with severe diarrhea, was greatly emaciated, and had difficulty in speaking on account of hoarseness. The patient was examined by a specialist in diseases of the throat, who found there was no tumor nor any condition which would explain this hoarseness, unless it was due only to a slight inflammation. On account of the erythema of the hands, the hoarseness and persistent diarrhea, a diagnosis of pellagra was made.

DISCUSSION

DR. RAVITCH said that while this case might be one of pellagra, the clinical picture of that disease was not clear to him. The patient had erythema on the backs of the hands and on the forehead, associated with roughness. He thought the mouth ought to be examined to see whether the patient exhibited pellagrous changes of the tongue. After having seen many cases of pellagra, he was inclined to think that this patient's symptoms were due to alcoholism. His skin was too elastic to suggest genuine pellagra.

* NOTE.—Since the case was presented, the roof of the mouth had become involved and at the present time (Jan. 1, 1918) was studded with grayish white, characteristic looking miliary nodules and ulcerations that appeared to be tuberculous in character.

ALOPECIA TOTALIS UNIVERSALIS. Presented by DR. HEIDINGSFELD.

The patient, aged 21, presented herself four years ago with a history of an alopecia totalis of four years' duration. It began on the forehead and spread over the entire scalp with an associated loss of eyebrows, eyelashes, and the subsequent loss of hair from the axillae and pubes. Only the hair over the pubes had partially returned. The scalp had shown no material improvement under six or seven different methods of local treatment. The Kromayer and Alpine-sun lamps were absolutely ineffectual in this instance.

DISCUSSION

DR. CHIPMAN said there was a special problem in these cases of total alopecia of the scalp, which was a little different from alopecia areata of the scalp as we saw it ordinarily. It seemed to him there was a difference in the degree or kind of infection, if it was due to an infection. The cases he had seen had not done well under local treatment. He had one case which developed in patches, beginning at the occiput, spreading around the sides, and then involving the top until the entire scalp became bald. It was a case which he mentioned in his series of cases reported at the meeting. In it there was no apparent primary focus of infection, but there was very marked adenopathy. There were enlarged glands in the occipital region where the first loss of hair was shown. These glands were the size of an English walnut. There were also enlarged glands in the back of the neck. The patient was a boy, 14 years of age, who gave a history of persistent colds, one after the other. Whether there was enough element of infection there to make matters of etiologic moment, he did not pretend to say. He looked for infection of the sinuses. Roentgen-ray plates were made which showed nothing abnormal. The teeth were in good condition. The appendix was apparently all right, and he could not find any focus of infection except persistent, recurrent colds and adenopathy.

He had also a case which was shown at the American Medical Association meeting in San Francisco. The patient was a youngster who gave a positive Wassermann reaction, and yet antisyphilitic treatment made no impression on his alopecia.

DR. SCHALEK stated that his experience agreed with that of Dr. Chipman. He had had several cases of total alopecia in rather young people, and treatment was of no avail. He believed alopecia in limited areas would get well under most forms of treatment, but when it came to total alopecia the cases were so intractable that scarcely any treatment was of any avail.

DR. HAZEN thought it was well for us to study these cases of total alopecia very carefully. If there was any one condition which might influence the hair it was a disturbance of the glandular secretions, and particularly as much hair began to develop at the time of puberty when so many glandular changes were taking place. Undoubtedly the changes that took place in these glands might cause the loss of hair.

DR. RAVOGLI stated that at the meeting of the International Congress of Medicine, held in London, England, in the Section on Dermatology, the subject of alopecia areata was discussed and Sabouraud took an active part in the discussion, and reported as having had cases in which he could find micro-organisms. On the other hand, in cases of total alopecia he could not find any micro-organisms whatsoever and came to the conclusion that there was some diathetic condition which produced the loss of hair. He also pointed out that there were some other skin affections due largely to a lack of circulation, consequently he believed that there was something in the system which influenced the hairs so that they were loosened and were lost.

DR. MCEWEN said he was struck with the persistency of the hair on the upper lip in the case shown. He inquired of Dr. Heidingsfeld if the pubic hair was

in any way abnormal. For instance, did the woman have a masculine distribution of the pubic hair?

DR. HEIDINGSFELD said he could not answer the question because the patient permitted only a local examination.

LYMPHANGIOMA TUBEROSUM MULTIPLEX. Presented by DR. HEIDINGSFELD.

This patient, a full blooded negro, aged 35, was the eighth child of seventeen children, the seven youngest of whom were all dead. Mother, father and four brothers and five sisters were all living and in the enjoyment of good health. The patient and his mother were the only members of the family who had shown any trace of the affection.

The eruption consisted of small rounded or oval lesions, pinhead to a pea or somewhat larger in size and normal in color, conforming to the rest of the skin. The lesions were firm to the touch, insensitive to pressure, embedded in and freely movable with the epidermis. The epidermis concealed from view the vast majority of the lesions, but these were brought distinctly into view if the intervening skin in which they were embedded was stretched. The involved areas showed a number of slightly depressed, pigmented cicatrices which the patient stated were the site of former lesions which underwent mild inflammatory ulceration and spontaneous involution. The affection had been present as long as the patient could remember, but the lesions had multiplied in number and had increased in size and extent. There was no itching, pain or other subjective or objective symptoms. The patient was married but had no children. The only other member of his family similarly affected was the patient's mother. The case came to the speaker's notice, Feb. 14, 1905, and had been under observation since that time, showing little or no change in the appearance and development of the affection.

DISCUSSION

DR. HAZEN said he could not consider this case as an example of lymphangioma tuberosum multiplex, possibly better known as syringocystadenoma. The histologic structure was entirely different, consisting simply of epithelial cysts which were occupied by curled hairs, while in syringocystadenoma the cysts did not contain hairs, and there were numerous strands of epithelial cells branching off from some of these cysts, which, by the way, were often considered as arising from the sweat ducts. On close examination of these growths a central sebaceous opening might be seen, and the skin was attached to this opening, and here only. He was inclined to consider the case as one of multiple sebaceous cysts which had the unusual feature of having lanugo hairs in each cyst.

DR. HEIMANN disagreed with both of the previous speakers. He felt reasonably certain that this was not a case of lymphangioma tuberosum multiplex. It looked like fibromatosis. The fact that there were elevated lesions indicated nothing to him. The patient had acne as well as the other disease and the skin was raised above the tumors among the comedones. The microscopic structure of lymphangioma tuberosum multiplex was pathognomonic and could not be mistaken. It was hardly necessary to go into that subject because every one knew what the picture was. Suffice it to say, it was unconnected with the hair that one found, and the cysts lined with flattened epithelium sometimes held the entire cyst contents or detritus. It had nothing to do with the hairs or with the sweat apparatus.

From the clinical and microscopic picture presented by this case, the speaker felt perfectly certain that we were dealing with multiple fibromatosis.

DR. HEIDINGSFELD, in closing, said that the biopsy showed that the lesions were cystic, for the most part oval in outline, well embedded in and encapsulated by a dense wall of connective tissue. This wall was lined with a concentric layer of epithelium undergoing fatty degeneration. The cyst cavity was filled with epithelial debris and a large amount of lanugo hair, coiled into concentric locks.

The case conformed in its clinical aspect and distribution to those reported in the literature, under the general term of lymphangioma tuberosum multiplex, with its varying pathology. Pollitzer had described a case with a somewhat similar pathology, under the name of multiple dermoid cysts, simulating lymphangioma tuberosum multiplex.

HYPERTRICHOSIS. Presented by DR. HEIDINGSFELD.

The speaker reported two cases of extreme hypertrichosis as having been successfully treated with radium. The condition developed in each case at a very early age and the hair was of extensive and of very heavy growth. The results spoke for themselves. Wherever the radium had been applied the hair had permanently disappeared, leaving the skin smooth, white, almost normal in character. His early results were somewhat discouraging, as exemplified in one case of nevus vasculosis, also presented at this time. For the time being, he was inclined to lay aside radium. He now felt that some of the shortcomings were entirely due to imperfect and faulty technic, insofar as the reaction was out of proportion to that necessary to produce the desired result, and occasioned more subsequent pigmentation and disfigurement than necessary. The skin could be so treated by proper shielding as to overcome these technical shortcomings and produce an excellent therapeutic and cosmetic result in cases in which the hair was so thick, abundant and heavy as to discourage epilation with the needle. Radium, in his judgment, could be successfully used with good cosmetic result, and therefore, he presented these cases in order to commend its further use in this particular field of endeavor.

DISCUSSION

DR. MACKEE said that in his experience radium in the treatment of hypertrichosis was no more efficacious than was the roentgen ray and, in this condition, that both agents were dangerous. There were certain similarities and dissimilarities between the two agents that might be considered with profit. Radium had one advantage, especially in inexperienced hands, in that the dose was estimated entirely by time. In other words, so far as concerned errors of dosage, radium was more fool-proof than was the roentgen ray. However, while a radium plaque could be applied with great ease to a flat surface of restricted size, it required skill to obtain an equal dose over a convex surface.

In the case of radium, unfiltered or filtered with very thin material, there were two types of radiation that entered the skin, namely, the beta and the gamma, the alpha rays being omitted from the discussion. The gamma rays, like the roentgen rays, ranged from slight to intense penetration and were considerably more penetrating than the roentgen rays, a fact of no importance in dermatology. The beta rays were analogous to the cathode stream of the roentgen-ray tube—negatively charged electrons. The beta rays varied considerably in penetration, but they could be almost totally intercepted by 3 or 4 mm. of aluminum. Both the beta and gamma rays of radium and the roentgen rays would make hair fall out and the cause for the defluvium was the same regardless of the agent. Both agents possessed a selective action on biologically and physiologically active cells and the cells of the hair bulb were of these types. On account of the hair bulbs being deeply seated a ray that exerted the maximum influence on the hair papillae and a minimum influence on the epidermis was, of course, preferable. For this reason many operators employed a filter to remove the less penetrating rays from the roentgen ray tube or to intercept the less penetrating gamma and beta rays from radium. But even so, it was impossible to produce a permanent alopecia with either of these agents without altering the skin to some extent. Even the highly penetrating rays, Benoist 12 for instance, would affect the epidermis. After enough ray had been administered to effect a permanent destruction of the hair papillae there followed an atrophy and disappearance of the follicles and of the arrectores. The sebaceous and coil glands underwent atrophy, the papillae were likely to be

flattened out and there might be alterations in the fat, connective tissue, etc. All these changes combined were likely to produce more or less visible wrinkling, and if a roentgen-ray or radium erythema occurred telangiectasia might result.

The speaker was not willing to say that radium did not possess some advantages nor that it was less fool-proof and less dangerous. What he particularly wished to emphasize was that both of these agents acted on hypertrichosis in the same manner and while it was possible to obtain good results with either, the danger of permanent injury was very great. He wished to correct the prevailing belief that radium acted in an entirely different manner from the roentgen ray and that it was a safe treatment for hypertrichosis. Radium, filtered or unfiltered, could produce burns that required years to heal and, in fact, ulcers that would never heal. No matter how employed an erythema would result if the dose was sufficiently large and this erythema might be followed by telangiectasia. The speaker was decidedly of the opinion that, at the present stage of our knowledge and technic, neither radium nor the roentgen ray was justifiable in the treatment of hypertrichosis excepting in unusual cases.

DERMATITIS HERPETIFORMIS. Presented by DR. HEIDINGSFELD.

The patient was a girl of 8 years, observed for the first time Nov. 19, 1916, when the face, trunk and extremities were extensively involved in a grouped papulo-vesicular eruption, which was patchy and crust covered. The eruption had been present ever since the patient was 3 months of age, without intermission, and the disfigurement and discomfort had been such as to exclude the child from admission to the public schools. The case was presented to show the material improvement which had been effected in six months' time. The greatest improvement was noted after normal blood serum was administered for the first time, Dec. 19, 1916. Five injections were given up to March 12, 1917. Treatment was accompanied by dietary regimen, and lotions and ointments for local use. The skin had cleared up entirely on April 9, 1917, followed by a relapse during the last few weeks, after treatment had been entirely remitted for a period of about six weeks. At the date of final report (December, 1917) there had been no remission.

DISCUSSION

DR. CHIPMAN said that he hesitated to take such a divergent view. In the first place, the cutaneous manifestations developed, as he recalled, when the child was a month old or less. To him the essential background in the case consisted of some deficiency in the skin, call it what one would, xeroderma or a mild degree of ichthyosis; there was something fundamentally lacking in the skin which created a *locus minoris resistentiae*. This predisposed to dermatitis, eczema, or any inflammatory reaction. Superimposed on that base was definite streptococcic infection. At the right angle of the mouth there was a slight fissure, with roughness of the skin, and in the photograph the lesions of the face and forehead were distinctly impetiginous. The speaker would interpret it distinctly as a streptococcic infection on a skin the resistance of which was lowered by a congenital deficiency of some sort.

DR. HEIDINGSFELD, in closing, stated that this little girl was seen for the first time early this year. She came with a history that the eruption manifested itself in early infancy and had existed up to the time she was first examined. The cutaneous manifestations were so intense in character that the child was not admitted to classes and she could not proceed with her school work. The result in this case was largely due to normal blood serum injections obtained from other patients, and every injection was followed by improvement. The child had had no treatment for two weeks, hence there was a slight relapse since the child was last seen.*

* NOTE.—At the date of final report, there had been no further remissions.

NEVUS VASCULARIS, UNSUCCESSFULLY TREATED WITH RADIUM.

Presented by DR. HEIDINGSFELD.

Miss R. L., aged 14, presented herself with a port wine stain which had been treated with radium with partially successful results. The patient was first observed when 4 years of age. Carbon dioxid snow was unsuccessfully applied. The deep-seated character of the telangiectases made the case inappropriate for that form of treatment.

Radium was first applied Nov. 20, 1915, twenty applications having been made from that date up to the hour of presentation. Much of the telangiectasis had been successfully removed, but the cosmetic result was as yet far from satisfactory, owing to a certain amount of secondary superficial telangiectasis and mottled discoloration and pigmentation. Much of this resulting disfigurement was attributable to crude and imperfect technic employed during the early part of the radium treatment.

DISCUSSION

DR. MACKEE said that this case illustrated the fact that radium could produce the same end-result as could the roentgen ray. The patient showed scarring. telangiectasia and little adherent scales that were probably the beginning of keratoses. The speaker considered this tissue potentially dangerous.

DR. HARTZELL asked as to the roentgen-ray treatment of keratoses.

DR. MACKEE in reply stated that roentgen-ray keratoses would occasionally disappear under the influence of one or two intensive doses of roentgen ray, provided the parts so treated had not been under the influence of the roentgen ray for a number of years. For this purpose, however, radium was more efficacious than the roentgen ray; particularly was this so of the beta rays. The speaker thought it was the beta rays that were instrumental in effecting a cure in these cases, and if the cathode stream of the roentgen-ray tube could be applied to the skin, it was possible that the result would be similar to that obtained by means of the beta rays of radium.

FOLLICLIS. Presented by DR. HEIDINGSFELD.

Mrs. L. S., aged 43, presented herself for the first time on August 2, 1917, with crust-covered papules, atrophic, irregular scars and atrophic pigmentations, disseminated over the legs, thighs, arms and forearms, behind the ears and over the anterior borders of the scalp. The affected areas over the scalp and neck were in a practically healed condition. The lesions over the extremities, however, were in a state of active ulceration, infiltration and inflammatory change, and were showing active progressive and regressive changes. The condition began on the extremities ten or twelve years before the patient presented herself. The lesions had been moderately painful and the site of persistent and intolerable itching. The patient had progressed materially toward recovery with tuberculin and *Staphylococcus aureus* injections.

DISCUSSION

DR. MCEWEN stated that the cutaneous manifestations in this case might be due to chronic stasis of the bowel which began just before the skin lesions appeared. The sclerotics and skin were yellow. The stools were light colored at times. When she had a diarrhea, there was a cessation of itching for three or four weeks. Itching was present everywhere. He believed the actual lesions on the skin were the result of trauma from scratching, plus infection, and that the real trouble lay somewhere in the bile tract.

DR. SCHAMBERG stated that distinct, elevated, indurated plaques, with epidermal thickening, were characteristic of prurigo nodularis.

DR. PUSEY said he saw in this patient some inflammatory lesions which he thought were the result of scratching. If the patient had not had any itching, one might come to the conclusion it was folliclis. Most of the lesions were

follicular, and many of them without elevation. They could not be called tumors without a great stretch of the meaning of the word tumor. He could not see how we could put this case in the well defined class of prurigo nodularis.

EPIDERMOLYSIS BULLOSA. Presented by DR. HEIDINGSFELD.

M. P., boy, aged 11 years, was first observed Oct. 3, 1916, at which time he had a well defined eruption of epidermolysis bullosa involving the knees, legs, arms, face, lips, palate, tongue, etc. An intravenous administration of 0.3 gm. of quinin was given October 4, and considerable improvement was noted on the occasion of the next visit, Dec. 12, 1916. The patient had also gained 5½ pounds in weight. Normal blood serum was administered Dec. 12, 1915, for the first time, and ten administrations were given up to March 12, 1917.

CUTANEOUS LESIONS FOLLOWING VACCINATION. Presented by DR. HEIDINGSFELD.

The speaker stated that he saw this girl before he left the alternating service and the dermatosis impressed him as a well defined eruption such as was seen in young children in whom the lesions consisted of diffuse bullae covering the trunk and extremities, with lesions on the mucous membranes, involving the nose, lips and cheeks. The child was very much prostrated at the time. There was a history of previous vaccination, but as he recalled the case, the vaccination was merely a coincidence rather than an etiologic factor. It was quite a while before the child developed an eruption. The child had been neglected a month or two before the eruption appeared. The onset was sudden. The child received one or two doses of quinin intravenously. Following this there was material improvement noticed and the child went on to convalescence, but the convalescence was never complete. The lesions disappeared rapidly, then relapsed, so that treatment was only a partial success.

DISCUSSION

DR. MOOK believed this was undoubtedly a case of bullous dermatitis following vaccination. The scar formation was unusual, although he had had one case in a man in which there was considerable scar formation.

As to the period of incubation, Simpson reported three days, and some of the cases reported had gone as long as three or four months. Dr. Schamberg, in discussing a paper in New York which the speaker read two years ago on this disease, suggested the use of arsenic. It had a good effect, although it was only temporary. The speaker had eight or nine cases about three years ago and none since, until in the last week he had had two cases, in one of which a vaccine of Parke, Davis & Co. had been used, and in the other Mulford's vaccine. In one case the period of incubation was a week and in the other two weeks.

DR. WALLHAUSER said he understood that the eruption in this case occurred three weeks after vaccination. He was impressed with the case as probably being one of dermatitis herpetiformis on account of the intense pruritus and the vesiculation which was present.

DR. RAVOGLI said he took charge of this child under a diagnosis of pemphigus, and continued treatment by injecting quinin under the skin, but the child was getting worse, and treatment was stopped. Then he resorted to the use of cacodylate of sodium every other day, injecting one-third of a grain, and the improvement was marked. The lesions began to disappear, but later the bullae recurred, and the use of cacodylate of sodium was stopped. Later an examination was made by Dr. Wherry who found in the bullae streptococci, from which a vaccine was prepared. He had given injections of this vaccine, beginning with one-half drop and going on to one drop and increasing to one drop and a half. Under this treatment the improvement was marked, but the bullae had again recurred. This was undoubtedly a case of bullous eruption following vaccination

and very likely from a streptococcus infection. The urine was examined and found normally acid, with no albumin or casts. The diagnosis of pemphigus was not tenable.

PERSISTENT ERYTHEMA. Presented by DR. HEIDINGSFELD.

The patient was a little girl, 4 years of age, who had an eruption all over the body. This eruption appeared six months ago; it began as ordinary hives, and later on the lesions became papular and bullous in character; the lesions extended all over the body and were accompanied by much itching.

The case was presented for diagnosis and treatment.

DISCUSSION

DR. CHIPMAN emphasized the presence of diseased tonsils in this case, and whether one was justified in considering focal infection as a possible cause or not, there was certainly some unknown quantity to be determined. In San Francisco they saw more of these cases than were found elsewhere, and he attributed this fact to the prevalence of fleas. The flea, like many insects, showed marked selection preferences for certain individuals. In San Francisco the stranger was usually attacked. Many infants reacted with urticarial papules. A curious fact was that of two or more children in the same family, often only one reacted. Was this because of the flea's preference for one individual, or was it because of special hypersensitiveness on the part of the subject who reacted? If due to the latter, it would seem that the possibility of focal infection as the ultimate cause was at least worthy of consideration.

DR. MOOK said the case impressed him as one of erythema figuratum perstans, but early diagnosis in a case like this was difficult, and it would take some time to make a correct diagnosis. The lesions over the shoulder were diffuse patches of dermatitis due to scratching, but there were configurations on the forearm that correspond exactly to the lesions as described in erythema figuratum perstans. He recalled the case of a man who had erythema on his cheek bones which corresponded closely clinically to the lesions observed in this child. These face cases frequently developed into lupus erythematosus. That was one of the reasons it was difficult to associate it with erythema figuratum perstans. The case must be observed for a long time before it could be classified.

SERIES OF CASES OF ERYTHEMA INDURATUM (BAZIN). Presented by DR. HEIDINGSFELD.

1. Mrs. J. B., aged 29, presented herself for the first time, May 18, 1915, with a history that the right leg in particular and the left leg slightly had been the seat of painful, deep-seated, indolent infiltrations, which slowly enlarged until they gradually reached the surface and covered an area the size of a silver half dollar and larger, underwent sluggish ulceration, which had persisted without being influenced by local or general treatment for two years prior to her first appearance. Six months' treatment cleared up the condition entirely, and the patient enjoyed a respite of good health for almost a year, during which time a normal child was born. Serologic examinations were made on the date of her first visit, May 18, 1915, and were absolutely negative. The patient suffered a severe relapse in August, 1916, which had gradually responded to treatment and gave evidence of again proceeding to a satisfactory clinical recovery at the present date—May, 1917.

2. L. M., aged 14, was first observed March 9, 1917, when there were several indurated nodules over the lower extremities. These lesions were deep-seated, infiltrated and painful in character, and of several years' duration. The serologic examination from both a Wassermann and Hecht-Gradwohl standpoint, was absolutely negative. Convalescence was established after eight visits.

3. Mrs. J. E. P., aged 44, married twenty-one years, was first observed Jan. 17, 1917. The lower limbs were studded with deep-seated, rounded, painful

indurations, many superficially ulcerated. Walking and standing were very painful, so much so that the patient had been confined to her home for many years. She was brought to the office in an automobile. Serologic examination was absolutely negative from both Wassermann and Hecht-Gradwohl standpoints. Lesions were also present on the thighs, buttocks, arms and breasts. The condition was of eight years' duration.

Tuberculin was first injected Jan. 17, 1917. Recovery was complete, except for pigmentation and discoloration, April 16, 1917, after eight injections of tuberculin.

4. Mrs. J. K., aged 34, had been married eight years. The affection began on the lower limbs two years ago in the form of multiple, deep-seated, painful infiltrations, which slowly reached the surface, became secondarily inflamed, ulcerated and disappeared with cicatricial pigmentation. Treatment was instituted March 16, 1917. Convalescence was established after eight visits. An enlarged cervical gland on the right side of the neck, which was originally larger than a good sized pigeon egg, had also shown material improvement with the treatment.

EPITHELIOMA OF THE HARD PALATE SUCCESSFULLY TREATED WITH RADIUM. Presented by DR. HEIDINGSFELD.

This patient, M. D. H., aged 58, was presented as a case of epithelioma of the palate which had been successfully treated with radium.

The patient presented himself for the first time, March 10, 1917, with an ulceration the size of a 5-cent piece, situated behind the last molar, which had a characteristic, thickening, everted border and a sloughing, necrotic base. The personal history and serologic examination were absolutely negative. The patient stated that the lesion began late in 1916, and when first observed was scarcely larger than a split pea. It had been the site of a moderate amount of pain and discomfort.

Radium was applied on March 10, 28, and May 1. On May 1, the infiltration and ulceration were gone and the mucous membrane of the affected area was slightly roughened, scaly and grayish.

EPITHELIOMA SUCCESSFULLY TREATED WITH RADIUM. Presented by DR. HEIDINGSFELD.

Mrs. D. M., aged 42, was presented as a case of epithelioma unsuccessfully treated with roentgen rays and successfully relieved with radium. The epithelioma, which was of ten years' duration, was situated below the left eye on the cheek near the nose, and was treated four or five years ago with the roentgen ray. After remaining healed for several years the condition relapsed. Superficial telangiectases and atrophic thinning of the skin, with some slight keratosis and pigmentation were evidences of previous energetic roentgen-ray treatment. Further roentgen-ray treatment was refused and the patient presented herself to the speaker, Dec. 29, 1916. Radium was applied, Jan. 19, 1917, and a single application effected the present result.

MORPHEA-LIKE EPITHELIOMA TREATED WITH RADIUM. Presented by DR. HEIDINGSFELD.

F. E., aged 46, was first seen April 7, 1917. He presented a sharply circumscribed, diffusely indurated boardlike plaque, the size of a silver half dollar, near the center of the right cheek. Roentgen-ray treatment was administered from July 30 to Nov. 12, 1911, without apparent benefit. The patient was not observed from May 5, 1912, to May 2, 1915, when the morphea-like character was lost and the well defined malignant character definitely established. Radium was applied for the first time on May 29, and continued with material improvement until Dec. 5, 1915, when a satisfactory clinical result was apparently attained. One small nodule near the center persisted, and although held in leash by intermittent applications of radium, at present showed evidence of serious involvement.

LUPUS VULGARIS. Presented by DR. HEIDINGSFELD.

1. Mrs. A. G., aged 37, presented herself for the first time, Nov. 16, 1914, with extensive lupus vulgaris, involving the tip of the nose, alae, septum and adjacent lip, and the anterior extremity of the nose almost to its middle third. The condition began when the patient was 16 years of age. Trichloracetic acid was applied at intervals of from two to four weeks, twenty-two times, from Nov. 16, 1914, to Dec. 7, 1915. Recovery was established in about ten months' time.

2. This patient, Mr. A. E. H., aged 62, presented a case of rather widely disseminated lupus vulgaris of the face, and was shown particularly for the demonstration of the result of radium treatment. The duration of the lesion was fifteen years, beginning at the orifice of the nose, spreading over that organ as far as the middle third of each cheek, down as far as the angle of the jaw on the right side and almost to the malar eminence on the left. When first seen, April 16, 1914, the disease was spreading rapidly and showed evidence of active inflammation in the form of numerous deep-seated nodules and superficial crust-covered ulcerations. The progressive character of the disease was evidenced by the mutilating destruction of the alae of the nose.

The patient showed some material improvement under topical applications of trichloracetic acid and the Kromayer lamp, from April 16, 1914, until March 23, 1915. The results, however, were far from satisfactory and rather discouraging in character. On Nov. 11, 1915, radium was first applied, and was reapplied on May 25, June 29, August 29, and Oct. 18, 1916, and April 4, 1917. Radium had effected a wonderful degree of improvement and had answered far better than any other application made in her case.

3. C. L., aged 49, presented a case of lupus vulgaris of the left cheek, successfully treated with radium. The condition was present from childhood and had persisted in spite of all forms of local treatment. Radium was first applied, Feb. 27, 1916, and six applications had been made up to the time of presentation. A cure had been practically effected.

4. Mrs. C. L., aged 49, presented herself with a lupus vulgaris of the face, beginning at the base of the nose twenty-four years ago, and which had extended over the entire nose, both cheeks and upper lip, and had transgressed into the mucous membrane of the mouth and inside of the nose. Both alae of the nose had been destroyed, and the orifices of the nares were markedly contracted.

Radium treatment was instituted, May 1, two plaques being applied for three hours each over the lip on the left side and lower border of the left cheek. Another application of radium was made for three hours each on May 8 and 23.

At the date of final report (December, 1917), the patient had progressed almost to complete recovery with systematic radium treatment.

5. H. G., aged 19, was first observed Feb. 16, 1916. She had a patch of lupus vulgaris on the center of the right cheek, originally covering an area of about the size of a silver dollar. The same had been present, according to the patient's recollection, for at least five years, possibly ten, beginning in the form of one or two isolated spots, the size of a pencil point. Radium was first applied April 1, 1916, and again June 26, 1916; the lesion was presented as a clinical cure and for its cosmetic results.

RHINOPHYMA SUCCESSFULLY TREATED WITH RADIUM. Presented by DR. HEIDINGSFELD.

This man, G. P., aged 56, presented himself with a rhinophyma of about five years' duration, following an attack of small boils and pimples which were opened by the patient. There was no previous treatment. The growth was most rapid immediately preceding radium treatment, and the lesion attained the size of a German walnut, perched prominently on the dorsal aspect of the nose. The first application of radium was made, Feb. 26, 1916, and the present result was obtained after eighteen applications at from two to four week intervals.

ATROPHIA MACULOSA CUTIS. Presented by DR. HEIDINGSFELD.

Miss M. H., nurse, aged 35, presented herself May 18, 1917. She had noticed a patch at the base of the neck, to the left of the median line, about two or three months ago, scarcely larger than a silver 10-cent piece, which she attributed to irritation from a close fitting standing collar of her uniform. No symptoms were in evidence except a slight sense of itching. The patch slowly enlarged until at the time of presentation it covered an irregular area, 2 or more inches in length, and about three-quarters inch wide. It had very scaly, sharply defined borders, and was yellowish red.

ATROPHIA MACULOSA CUTIS. Presented by DR. HEIDINGSFELD.

Mrs. M. K. presented lesions of atrophia maculosa cutis, or "white spot disease," with a rather extensive distribution over the shoulders and median line of the back as far as the lumbar vertebrae and a large patch covering the right groin. The duration of the disease was only one year. The patches were characteristically white, scaly and studded with comedolike bodies and some showed cigaret-paper-like atrophy. Two vitiligo-like areas were situated immediately below each eye.

The chief interest in the case centered in its characteristic appearance, rapid spread, wide distribution, and entire absence of the diffused, hide-bound induration characteristic of morphea or scleroderma, with which the affection was at times confused. Superficial telangiectasis was in evidence. This condition sometimes manifested itself suddenly over night, and in somewhat hemorrhagic form.

The patches were treated with radium for the first time, April 6, 1917, in order to determine the therapeutic effect of the remedy on this condition.

PRURIGO NODULARIS. Presented by DR. HEIDINGSFELD.

This patient, Mrs. A. G., aged 50, presented herself with a history of severe itching seven years previous to the time of her first visit, which was followed, after an interval of several years, by the lesions which were present over the lower legs, thighs and forearms. The lesions were discrete, disseminated, yellowish-brown, pea to cherry-sized papules, warty in character, surmounted by superficial scales, some of them showing a tendency towards vesiculation. They disappeared with slightly pigmented depressions, simulating those of lichen planus hypertrophicus. After they had completely disappeared, the skin was left slightly cicatrized.

CASE FOR DIAGNOSIS, RESEMBLING XERODERMA PIGMENTOSUM. Presented by DR. HEIDINGSFELD.

F. A., aged 6 years, was presented as a case for diagnosis. The patient was first seen, Dec. 27, 1912, when a tentative diagnosis of xeroderma pigmentosum was made. His condition at that time was exemplified by the accompanying photograph. The face and forearms were studded with innumerable circumscribed, slightly elevated yellowish-brown pigmentations. The case was first seen by Dr. Tucker of Toledo, who made a tentative diagnosis of xanthoma and treated it as such for a year.

The lesions scarcely showed enough infiltration or color value for a well defined case of xanthoma. The condition began on the cheeks and temple and spread to the chin and neck, hands and forearms. When first observed by the speaker, the body and extremities were entirely spared. Local and general measures for a period of thirty days showed no material change. The patient was lost sight of for a period of almost four years and was last observed April 14, 1917, at which time the lesions on the face and hands had markedly faded and, for the most part, disappeared, but the body had become extensively covered with circumscribed pigmentations of the same character and appearance as the fading lesions present over the face and forearms.

It was evidently not a case of xeroderma pigmentosum for the reason that it was regressive rather than progressive, and it had become disseminated over the entire body, instead of being localized to the hands and face. The cause was entirely obscure, and the condition was not affected by season or any localizing or general influences.

URTICARIA WITH PIGMENTATION. Presented by DR. HEIDINGSFELD.

Mr. W. O. C., aged 52, married twenty-two years, presented himself for the first time, Jan. 30, 1917.

Two years prior to marriage, he patient stated that he had a genital manifestation which was diagnosed as syphilitic, but which he clinically described as chancroidal. He at that time had a double suppurating bubo, the right side requiring free incision. He was treated for several years intermittently with protiodid of mercury. Five years ago he developed a hemorrhoidal condition which was complicated by stricture of the rectum, according to the physician's statement, for which the patient was operated on by a Chattanooga physician. The operation almost caused the patient's death and had left him with partial incontinence.

When the patient presented himself for the first time, Jan. 30, 1917, the trunk and extremities were the seat of a disseminated papular, somewhat nodular, eruption which itched intensely and disappeared with more or less pigmentation. The lesions, for the most part, were the size of a finger nail. Under soothing lotions, normal blood serum injections and dietary restrictions, the patient proceeded to a clinical recovery in sixty days. The patient was last observed April 11, 1917. Pigmentation had persisted in practically unaltered form.

URTICARIA PIGMENTOSA. Presented by DR. HEIDINGSFELD.

This patient, Miss A. F., aged 26, stenographer, presented herself for the first time, Sept. 30, 1916, with a condition which had remained practically unchanged up to the time of presentation.

The condition began some eight years ago in the form of a few isolated, discrete papules on the forearm, which had persisted and had slowly multiplied until they covered the forearms extensively with a few scattered lesions situated on the backs of the hands and the face and neck. The case was presented in order to demonstrate the value of fulguration in this form of affection. Fulguration was first given April 1, 1917, and repeated April 30, 1917, with distinct evidence of material improvement.

At the present date of report (December, 1917), treatment with fulguration had proven unsuccessful. The early improvement was more apparent than real and only of transient character.

ACNE VARIOLIFORMIS. Presented by DR. HEIDINGSFELD.

C. N. S., had an acne varioliformis which began twenty-five years ago, when the patient was 17 years of age, and had persisted without intermission until the time of presentation. It began at the anterior border of the scalp, spread down over the face and backward over the scalp, with a few scattered lesions over the chest. The disease had practically run its course and the patient was only troubled with a few intermittent lesions. Ten per cent. white precipitate ointment had been the most effective remedy in his case.

PSORIASIS AND KERATOSIS ARSENICALIS. Presented by DR. HEIDINGSFELD.

Miss B. S., aged 40, presented herself for the first time, April 29, 1915, with a well defined case of psoriasis of about fifteen years' duration, with generalized pigmentation and keratosis of the hands and feet, following prolonged arsenical medication, consisting chiefly of Fowler's solution taken internally over a period of many years. The patient had also received four deep muscular injections of

salvarsan and three intravenous injections of the same remedy during the year prior to her first visit, at the hands of physicians who erroneously diagnosed the case as syphilis.

There had been marked onychitis and secondary structural changes in the nails with repeated loss of the same from the arsenical medication. The keratosis of the palms of the hands and soles of the feet had been materially benefited by radium applications. The pigmentation over the body had spontaneously improved.

LICHEN PLANUS HYPERTROPHICUS. Presented by DR. HEIDINGSFELD.

Mr. A. G., aged 25, presented himself, Jan. 30, 1915, with an infection of syphilis, with characteristic secondaries and considerable pigmentation on the lower extremities. This eruption disappeared after the administration of neosalvarsan and was followed in February, 1915, by an area on the right knee, on the inner side of the patella, which was red and persisted for quite a period of time. New lesions appeared on the anterior tibial surface of the right leg and extended down the leg. The first area faded gradually with purplish discoloration, followed by an atrophic scar. The lesions on the leg were irregular in outline, purplish-red, with slight scaliness, and became pigmented and faded, leaving an atrophic scar. No infiltration or hardness of the skin was noticeable. A small area about the size of a half dollar appeared about the same time on the anterior tibial surface of the left leg, which had faded to a slightly depressed atrophic scar, with purplish discoloration in the center. There had been considerable itching.

CUTANEOUS HORN. Presented by DR. HEIDINGSFELD.

This patient, J. E., man, aged 61, had a lesion on the left hand at the middle third of the second metatarsal, about the size of a half dollar, which began three years ago, following a slight trauma, caused by striking the back of the hand on a board. This left a slight abrasion, which persisted and took on its present character. The patient had been able to bring the condition under fair control by frequent paring.

LICHEN PLANUS SCLEROSUS. Presented by DR. HEIDINGSFELD.

This patient, E. F., man, aged 28, married six years, presented himself with a lichen planus sclerosus of four or five years' duration. The condition began on the lower legs, and almost entirely disappeared for a period of six months or a year. Hypodermic injection of atoxyl had been barren of results.

At the date of writing, December, 1917, the patient had proceeded to complete clinical recovery under treatment with mercurial injections.

CHICAGO DERMATOLOGICAL SOCIETY

Regular Meeting, Oct. 16, 1917

WILLIAM ALLEN PUSEY, M.D., *President*

RECURRENT PITYRIASIS ROSEA. Presented by DR. E. P. ZEISLER.

The speaker presented himself as a case of recurrent pityriasis rosea. He had had a previous attack in 1911 which lasted for about ten weeks. The present attack began four weeks ago with considerable itching, slight fever, and a papular eruption. The primary patch was on the back; there were lesions on the dorsum of the feet and on the backs of the hands which locations were rather unusual. The eruption on the body, the arms and in the groins was typical of pityriasis rosea in the declining stage.

CASE FOR DIAGNOSIS. Presented by DR. HARRIS.

The patient was a man, aged 44, with an eruption of small purpuric macules of seven days' duration. There was marked involvement of the left side of the body in contrast with the right, the left side being more affected than the right. The fact that the man slept on the left side might account for the distribution. The eruption had faded considerably in two days. There was no etiology excepting perhaps overindulgence in corned beef.

DISCUSSION

DR. BAER believed the eruption was due to intestinal absorption.

DR. FOERSTER was struck by the resemblance to a copaiba eruption, and wondered if the corned beef which the man had eaten had been treated with benzoic acid. He thought it had been stated that benzoic acid might produce a purpura-like eruption, and that might be the condition in this patient.

DR. HARRIS said the eruption was an ordinary purpura which was much more abundant on the left side. He believed there must be some explanation for the fact that the left side of the neck and of the entire body was so much more affected than the right and thought it might be due to the fact that the patient slept on the left side. The man had been working over time and had eaten a good deal of corned beef in a Greek restaurant, which was the only etiologic factor which could be ascertained.

CASE FOR DIAGNOSIS. Presented by DR. HARRIS.

The patient was a woman, housewife by occupation, aged 48, who had entered the hospital with a diagnosis of erysipelas. Six weeks previously she had had a cold and cough accompanied by itching all over the body. A small elevated spot appeared on the leg which, the patient stated, became a blister and the leg swelled. Similar lesions soon appeared at the outer canthus of the eye which gradually spread but were not painful. Following needle puncture for blood counts, lesions appeared on the ears spreading from the puncture. Within the last two weeks a lesion of the right cheek appeared, which gradually enlarged. There was slight rise of temperature. The general history was negative except for chronic constipation.

Blood Count: 4,884,000 red blood corpuscles; 51,000 white corpuscles; 5 per cent. mononuclears; 40 per cent. neutrophils; 27 per cent. eosinophils, and 28 per cent. myelocytes. This count is probably incorrect as another specimen showed no myelocytes.

The lesions were large flat plaques, distinctly elevated, brownish red, somewhat edematous and showing a tendency to clear in the center. One patch occupied most of the left side of the face from above the eye to near the corner of the mouth. The lobes of both ears were affected and there was a crescentic patch larger than a dollar on the right cheek.

DISCUSSION

DR. STILLIANS was impressed by the flat lesions on the body made up of small nodules, in many instances arranged in ring formation. He thought these grouped lesions would be against the diagnosis of urticaria and that the case was a possible leukemia cutis.

DR. FISCHKIN thought the lesions of the eyebrows and face could be regarded as leukemia, but was doubtful about the flat lesions on the skin elsewhere.

DR. HARRIS did not think it was leukemia, first, because cutaneous lesions were so uncommon in myeloid leukemia; second, the lesions on the body were like those of urticaria; he believed it was a case of persistent urticaria with pigmentation. At the meeting in New York there were shown three cases of persistent urticaria much like this due to taking phenolphthalein. At one of the meetings

last year he had shown a similar case which cleared up very rapidly after being placed on a nitrogen-free diet.

DR. PUSEY thought the lesions on the body might be mistaken for an urticaria pigmentosa, but they lost that appearance on the face. The lesions about the face showed an exfoliation of the skin from an acute process and the patient might have had an erysipelas but underneath that she had a leukemia. Urticaria would not produce a sharply defined, circumscribed area; these were as sharply circumscribed as a lupus erythematosus. He thought they were leukemic infiltrations.

TUBERCULID. Presented by DR. HARRIS.

The patient was a man, aged 57, a laborer by occupation. The trouble first appeared thirty-six years ago as a lump in the axilla which was lanced at the time and gave him no trouble but persisted as a hard lump. One year ago this lump began to swell and he soon developed other enlarged glands. In May, 1917, after shaving, one small blister appeared on the face; many more soon developed, rapidly spread and became crusted. The lesions were slightly pruritic and many of them contained pus. The dorsal surface of the hands, forearms, ankles and legs became involved. The condition cleared up under treatment with bland ointment and the patient left the hospital in fifteen days with the diagnosis of Hodgkins' disease. He returned in two months with recurrence of the skin lesions and larger glands. Since then lesions appeared in a zosterlike distribution on the left side of the abdomen and back. They first appeared as hard, reddish papules with a tendency to spread peripherally and break down in the center.

DISCUSSION

DR. FOERSTER had never seen any lesions of this sort in a case of Hodgkins' disease. The zoster-like arrangement of the lesions on the left side of the abdomen and back would indicate some peripherally expressed central irritation.

DR. LIEBERTHAL believed the skin manifestations might be a zoster.

DR. MCEWEN was impressed with the similarity of appearance of many of the lesions to a tuberculid and thought that possibly the man might have had a bona fide zoster a month ago which in its evolution had been changed in type by reason of his pseudoleukemia, with the result that he now showed a peculiar zoster-form eruption suggestive of a tuberculous process in the skin.

DR. STILLIANS stated that he saw the patient several months ago when he had an eruption very much like a zoster, but not grouped like a zoster, and there were lesions on the feet at the same time. When seen again some time afterward the lesions had all cleared up.

DR. PUSEY thought the man had a double lesion. He had a cachectic folliculitis all over the body and the localized lesions were due to zoster in an cachectic patient. He would account for the other lesions in the groin and elsewhere by the fact that he had had a generalized zoster.

DR. HARRIS believed that the patient had a Sternberg type of tuberculosis and that the lesions were tuberculosis of the skin. He considered it similar to a case shown by Dr. Pardee twice, once when the patient's skin was broken out with lesions similar to these and afterward when they had all cleared up. A biopsy in that case showed tuberculosis. He would explain the zoniform distribution of the eruption by the fact that possibly the man had had a neuritis located in that region in conjunction with the tuberculosis, or as the result of the arsenical treatment or from some other cause, and that the skin in that region thus became an area of lowered resistance in which the shower of organisms were able to produce changes. He considered the case one of generalized tuberculous lymphadenitis as described by Sternberg with multiple lesions of cutaneous tuberculosis.

TWO CASES OF PELLAGRA IN ONE FAMILY. Presented by DR. BAER.

The patient was a male child, aged 5 years. Early in the summer of 1915 the eruption appeared about the nose and adjacent cheeks, and disappeared when winter came. In the summer of 1916 the eruption reappeared about the cheeks, nose and on the dorsum of the hands; it disappeared when the cold weather came on. Early in the summer of 1917, the eruption appeared on the face, around the neck and on the dorsum of the hands. The child developed nervous and intestinal symptoms. The triad of typical symptoms left no doubt of the diagnosis of pellagra.

The interesting feature of this case was that a sister of this patient died of pellagra eight years ago—three years before this child was born. The home surroundings, food, etc., were excellent.

URTICARIA PIGMENTOSA. Presented by DR. MACKEY.

The patient was a young lady, aged 21, who presented a skin trouble which she had had since infancy. The disorder consisted of diffuse, small pigmented lesions extending over the trunk and upper portion of the extremities and a markedly exaggerated cutaneous reflex.

PERSISTENT CHANCRE. Presented by DR. HARRIS.

The patient was a man, aged 49, a cook by occupation, who entered Cook County Hospital, June 26, 1917. Three weeks previously he had kissed a woman. He had a cold sore at the time. Twelve days later a large, hard sore developed on the left side of the lower lip which rapidly increased in size; at the time he entered the hospital it was the size of a quarter. The Wassermann reaction was ++++ and spirochetes were found in the lesion. He had received seven injections of neodiarsenol and had had mercuric inunctions since July 1. The sore steadily increased in size until there was a mushroom shaped ulcerated growth occupying about three quarters of the lip. It was everted and had a depressed center. It was very hard and painless. When first seen the regional adenopathy was marked but had largely disappeared.

DISCUSSION

DR. LIEBERTHAL thought it would be a good plan to have the growth trimmed down by surgical measures and believed that possibly the treatment would then have more effect. He stated that the growth might be an epithelioma in addition to the infection.

DR. BAER thought it might be a combination of syphilis and epithelioma.

DR. ZEISLER thought the lesion was unusually large for a chancre. Furthermore, the absence of any response to antisyphilitic treatment certainly spoke against a chancre and for a rapidly developing epithelioma or possibly a sarcoma. He thought the spirochetes which were found might easily have come from the excretions from the mouth rather than from the lesion itself.

DR. MCEWEN believed there was no doubt about the lesion being syphilitic but the evolution of it had suggested to him that possibly the man had had a precancerous condition of the lip at the time of the syphilitic infection and that under the stimulation of the infection the condition had now taken on the characteristics of epithelioma.

DR. FISCHKIN thought the condition was surely not a chancre or it would have healed under the vigorous treatment, and he did not believe it was a carcinoma because if it was it would have shown more breaking down than was present.

DR. HARRIS did not believe it was an epithelioma because the whole lesion was made up of connective tissue, no epithelium could be seen except at the border. It was too hard for sarcoma. The question was whether it was a chancre that had refused to heal because of the marked infiltration or whether the growth was the result of secondary infection of the original chancre with some of the

organisms of the mouth of low virulence. The patient's teeth were in a most unhygienic condition. The other evidence of syphilis had disappeared after treatment. He had suggested roentgen-ray treatments and if that accomplished nothing he thought the growth should be removed. The man had received typhoid vaccine at the County Hospital and the growth had shown no retrogression.

DERMATITIS REPENS. Presented by DR. MITCHELL FOR DR. ORMSBY.

The patient was a man, aged 26, who was first seen Aug. 27, 1917. He was a painter by occupation and presented an eruption which had been present for six years and which followed the use of varnish remover. He had had a urethritis and a positive Wassermann reaction. He had been treated with salvarsan and the Dakin-Carrel solution and the condition was somewhat improved.

DISCUSSION

DR. FISCHKIN believed the condition of the lips might be due to a syphilitic sclerosis and thought the condition of the hands was due to neglect. He noted the fact that the scaling was of a superficial character due to the inflammatory changes.

DR. SHAFFNER had considered the possibility of a so-called parasitic dermatitis.

DR. HARRIS believed the condition of the lip was due to syphilis and that of the hands was a parasitic affair and on top of that was a dermatitis from some cause or other. The finger nails made one think it might be a parasitic affair.

DR. MCEWEN thought the element of neglect probably entered the problem. It had been stated that the varnish remover contained arsenic; he did not think that arsenic entered into the composition of that material. He asked what the reporter considered the prognosis to be.

DR. PUSEY believed the hands represented one of the chronic cases of dermatitis perstans. There were two types, one a chronic dermatitis of the hands with scaling and sharply defined borders, which extend all over the palms and at times caused a little atrophy and contraction. Some of these were due to ringworm and some to other infections and they were very persistent and difficult to cure. He had seen cases which had extended over years and he considered the prognosis very bad in such cases. He thought an eczematoid dermatitis of the hands described it very well.

DR. MITCHELL stated that they had seen the man for the first time the latter part of August. He had been treated in Denver by good men almost constantly for six years and finally became unable to work any longer. Someone told him he ought to see Dr. Ormsby and he "bummed" his way east for that purpose. The hands had never been any better than when he was first seen and the constant picture was that of a well defined plaque undermined with numerous little pustules. He had made cultures repeatedly and they were not at all constant—sometimes they were negative. He had also made a careful search for fungi with negative results. The fact that the blood gave a positive Wassermann reaction led to salvarsan therapy because of the fact that in three cases of dermatitis reported last year, one healed as the result of antisyphilitic treatment, but it did no good in this case. He was given the Whitfield ointment in the hope that it might be a fungus infection and that it might yield. That removed the scales and made him feel more comfortable. Radiotherapy had been of little value. He was then put on the Dakin-Carrel solution which had resulted in the present condition. He was much better but they did not anticipate a cure.

FAVUS WITHOUT LOCALIZED LESIONS. Presented by DR. STILLIANS.

The patient was a boy, aged 14, of German descent and somewhat stunted growth, who was sent to the Cook County Hospital from an orphans' home. At the time of admission he had escaped from custody for several days and his

whole scalp was heavily crusted with a dry, brittle mass, yellowish white, which showed in potassium hydrate as a mass of branching mycelium. On cleansing the scalp no definite lesions appeared, only a general scaliness which if neglected again formed a heavy crust. On presentation only the marked scaliness of the scalp was seen; the hairs were not loose and there were no favus cups. The diagnosis rested on the mycelium seen in the crusts, and on the fact that cultures on sugar mediums were overgrown by other fungi, as was characteristic for favus. Cultures on gelatin or ordinary agar had not yet been made.

XANTHOMA PLANUM AND TUBEROSUM. Presented by DR. STILLIANS.

The patient was a Roumanian Jewess, aged 42, who had had yellow plaques on the eyelids for twelve years or more and who had been treated for "Schnurleber" for several years. Within the last two years the nodules on the nose and external canthus had appeared and had gradually increased in size, without pain or other subjective disturbance.

She presented a very marked case of xanthoma planum completely encircling the eyes. On either side of the bridge of the nose was a hemispherical nodule about 1 cm. in diameter and 0.5 cm. in height, which was hard, movable with the skin and only slightly tender, over which the skin was of normal color and texture. At the left external canthus was an oval nodule somewhat smaller, hard and movable also, but the skin over it was dark red and showed dilated capillaries. These nodules varied in size at different times. The patient was nervous but otherwise felt well. The blood count and urine were normal; the Wassermann reaction was negative.

DISCUSSION

DR. FOERSTER said she had some fibromas, one on the lid and one on the forehead. He thought the lesion on the side of the nose might be a steatoma.

DR. PUSEY considered it a case of xanthoma.

DR. STILLIANS had considered the case a possible combination of xanthoma palpebrarum and xanthoma tuberosum. He had been using radium treatment but it had not had much effect. He believed the combination did not occur very often.

CASE FOR DIAGNOSIS. Presented by DR. WAUGH.

The patient was a well nourished young man, aged 20, whose disorder had been present for four years. The trouble first appeared on the face, ears, back and gluteal regions; later it involved the extremities, especially the dorsal surfaces of both hands. The lesions appeared as deep-seated, firm, reddish papules or nodules, which were frequently quite tender; later they became necrotic with a depressed center, assuming at times a faint, bluish-red color, and leaving scars on healing.

DISCUSSION

DR. HARRIS believed it was a tuberculid.

DR. FISCHKIN considered it a folliclis.

DR. WAUGH stated that tuberculin had been given and the lesions had become much worse but very marked improvement followed the roentgen rays administered in divided doses.

MANHATTAN DERMATOLOGICAL SOCIETY

Regular Meeting, May 11, 1917

FRED WISE, M.D., *Chairman*

LEPROSY. Presented by DR. MACKEE.

G. P., man, aged 26, born in Greece, came from Dr. Fordyce's clinic. He had been in this country eight or nine years. The duration of the eruption was less than a year. He showed on the right side of the face an erythematous lesion

very slightly infiltrated, and on the left forearm there were several erythematous plaques, all of which were anesthetic. The ulnar nerves could be palpated, and the exhibitor believed the case to be one of leprosy of the annular maculo-anesthetic type.

DISCUSSION

DR. GILMOUR asked the members if they knew of any authentic cases of leprosy developing in New York State.

DR. OCHS said that Dr. Parounagian had had a case which never was out of New England until the patient came to New York.

ELEPHANTIASIS. Presented by DR. MACKEE.

The patient, D. J. S., man, aged 46, was seen for the first time at Dr. Fordyce's clinic that afternoon. The duration of the condition was seventeen years. The patient had never been in the tropics or even in semitropical countries. The patient reported that his Wassermann test was negative and that his blood had been tested both in the daytime and at night for filaria without success. The urine was also negative. There were never any chills and no recurrent attacks of erysipelas. The left leg was enormously swollen, being four times the size of the opposite limb. The speaker thought that the case was one of pseudo-elephantiasis, or possibly it belonged under the caption of elephantiasis nostras (a chronic streptococcic lymphangitis), and that it might be due to a focal infection.

DISCUSSION

DR. WALLHAUSER said the induration was rather too soft in character to suggest the diagnosis of elephantiasis.

DR. OULMANN said he did not regard this as a case of true elephantiasis, but a lymphostasis, probably due to pressure. While the legs were immensely swollen, the thighs, especially of the one side, were very slightly swollen, but the pubic region seemed to be affected also. He thought that in elephantiasis the swelling ought to be more uniform. The speaker said the pressure was probably due to some abdominal obstruction.

DR. ABRAHAMS said, in regard to these cases, that there was such a thing as idiopathic edema. He had seen the condition similar to that in this patient twenty-five years previously which affected one side of the body, and they had called it, at that time, unilateral idiopathic edema. In the last twenty-five years this had been traced to pressure in the pelvis, causing the edema. He would not be at all surprised if the condition in the present case was due to pressure on the pelvis and he would anesthetize this man and examine the pelvis. He said the condition was also found in women with fibroids.

DR. GILMOUR said an examination of the entire abdominal cavity ought to be made to find what caused this condition.

DR. MOUNT thought this condition due to a venous stasis and said it might also be due to pressure on the lymphatics.

DR. ABRAHAMS said that some years ago at the Lebanon Hospital he had seen a case of that kind, affecting only one lower extremity. The patient was from 40 to 45 years old and a sort of fixture in the hospital. During one summer they anesthetized the woman and found in one fossa an enormous mass of fecal matter. After this was removed the edema disappeared.

DR. GEYSER said he would suggest, if it were possible, that this patient be put to bed in an inclined position in which the extremities would be high and bandaged. In the course of one week's time, if it proved what they expected it to be, namely, an ordinary lymph stasis, the swelling would disappear, and if it were elephantiasis it would not disappear.

DR. SATENSTEIN said he did not see how any obstruction in the pelvis or abdominal cavity could persist for seventeen to nineteen years. Any form of

obstruction present so long would have been fatal by this time, such as sarcoma, glandular involvement and so forth, and with it one would have had other symptoms. If this were due to an obstruction, why was it limited to the lower extremities? The thigh on one side had never been affected in this patient, and the swollen condition was always below it. The speaker said he did not understand how edema was to be limited to the lower extremities under such conditions.

DR. GILMOUR said he had seen one case which looked like this, in a woman about 40 years of age. It involved one leg, extending to the thigh. She had what Dr. MacKee hinted at, that is, every few months she would have a red patch around the knee, evidently an infective lymphangitis, preceded by chills and fever, and she would be fairly ill. The speaker did not remember how often this happened, but he thought at least a half dozen times. Her blood had been tested and no filaria were found.

DR. SATENSTEIN said Dr. Gottheil had a case which had been presented three times and two of the succeeding times were two years apart. The condition had begun with a thickening around the ankle, and at that time Dr. Pisko had suggested tuberculosis on account of nodules in the skin. The patient was kept in the City Hospital for five years. She would get an attack of so called erysipelas every few months. There was an increase in the diameter of the extremities and the process had extended up to both hips when the speaker saw her last, and she then weighed about 300 pounds. The condition was markedly verrucous. Streptococcus organisms were demonstrated in the deeper tissues.

DR. WISE said the patient was under the care of Dr. Newman of Newark, who had made a tentative diagnosis of Milroy's disease. This was described as an idiopathic swelling of the lower legs. The speaker said he believed that such a condition ought to be considered in this case.

MOELLER'S GLOSSITIS. Presented by DR. WISE.

The patient was an adult woman from Dr. Fordyce's clinic. She presented superficial lesions of the tongue. There was a suspicion of Moeller's glossitis, but whether these lesions coincided with that diagnosis or not the exhibitor was not sure. The patches were smooth, glazed and painful, especially on eating spicy foods or condiments. They appeared and disappeared at irregular intervals and often healed spontaneously over periods of several weeks at a time. The areas of predilection were the sides and under surface of the tongue.

DISCUSSION

DR. OCHS said he had a similar case, which he had presented before the Society. The plaques came and went. The patient complained that the lesion was very sensitive to sharp foods. Very frequently the patient would get an attack of that character when the bowels became constipated, and she had quite a little inclination in that direction. She would have benign plaques and also what was known as "psoriasis" of the tongue. The speaker had two such conditions of the tongue which healed. Lately he had given the patient one salvarsan injection, but the trouble recurred. It responded, however, to the treatment for psoriasis. Whether it was a true psoriasis of the tongue or not he did not know. He was inclined to believe that the case presented fell in line with so called psoriasis of the tongue.

DR. GEYSER said he did not know what the name of the lesion might be. He thought if they put the patient on alkaline treatment, or any kind of vegetarian treatment, the disease would get well. From any food producing acid she would be prone to develop these lesions.

DR. WISE said he had seen such benign plaques of the tongue of which Dr. Wallhauser had spoken. Instead of being manifested by a denudation of epithelium, the lesion was raised, with distinct circles, which were visible at a

distance. This woman had excoriations, not raised lesions. The speaker said the etiology of Moeller's glossitis was unknown. Acid or alkali did not play any part in Moeller's glossitis. The patient he presented had a cachectic appearance.

MILIARY SYPHILID. Presented by DR. WISE.

The patient was a colored woman, aged 33, the duration of whose lesions had been four months. She was from Dr. Fordyce's clinic. Almost the entire body presented numerous closely set miliary papules, with large areas which had coalesced and had become scaly. In many areas the eruption presented pinhead sized, pitted scars, the remains of previous papules.

NOTICE

As we go to press we are saddened by the news of the untimely death of Dr. James C. Johnston. Dr. Johnston was taken ill in France, where he was in the service of his country. He died shortly after returning home.

Book Review

A MANUAL OF CLINICAL DIAGNOSIS, BY MEANS OF LABORATORY METHODS, FOR STUDENTS, HOSPITAL PHYSICIANS AND PRACTITIONERS. By Charles E. Simon, B.A., M.D., Professor of Clinical Pathology and Physiological Chemistry in the University of Maryland Medical School and the College of Physicians and Surgeons, Baltimore. Ninth Edition, enlarged and thoroughly revised. Illustrated with 207 engravings and 28 plates. Lea and Febiger, Philadelphia and New York, 1918. $6.00.

The ninth edition of Simon's well-known book on Clinical Diagnosis constitutes a thoroughly reliable and modern treatise on this subject. The book contains 851 pages and is well illustrated, printed, indexed and bound. The subject matter is divided into two parts, the first dealing with technical questions and the second is a collective presentation of the laboratory findings in the various diseases under their corresponding headings. Of special interest to the dermatologist and syphilologist are the well-written chapters on the Wassermann reaction, Lange colloidal gold test, globulin reactions, cell counting, examination for spirochetes, etc.

We believe that for a book on laboratory diagnosis, the author does not devote enough space to dark-field examinations. Every step of the technic should be described. If space is lacking it would seem advisable to omit the paragraphs on cultural methods. Goldhorn's stain is recommended when one desires to stain the spirochetes. This is an excellent stain but we understood that it deteriorates in a few weeks and, furthermore, we understand that it is not on the market.

It is disappointing not to find anything about the use of tuberculin for diagnostic purposes and we failed to find a word about laboratory examinations for the various ringworm fungi. Blastomycosis and actinomycosis are represented but sporotrichosis is omitted. These omissions are specialized subjects and probably should not be included in a general treatise of this kind.

Every physician, including the dermatologist and syphilologist, should possess a modern text-book on clinical diagnosis based on laboratory methods and for this purpose we can recommend the work under consideration.

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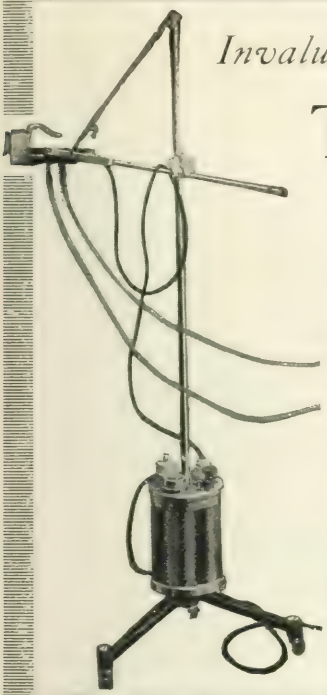

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*United States Public Health Bulletin No. 69, May, 1915.

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